

UNIVERSITY OF TORONTO

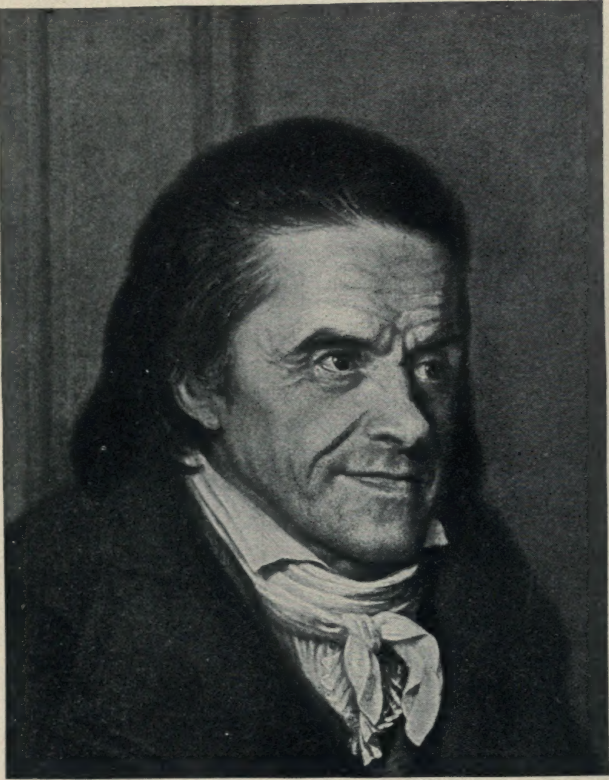


3 1761 01790213 1

UNIV. OF
TORONTO
LIBRARY



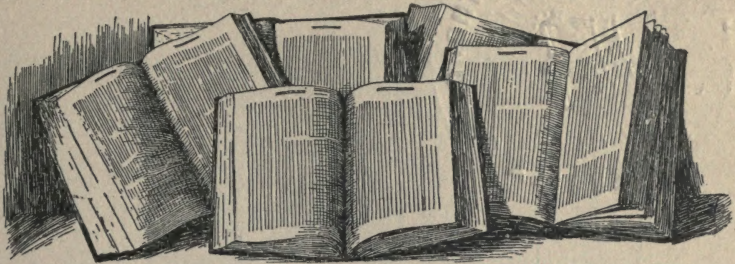
Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation



Johann Heinrich Pestalozzi

Force not the faculties of children into the remote paths of knowledge until they have gained strength by exercise on things that are near them.

—*Pestalozzi*



PUBLIC SCHOOL METHODS

BY THE FOLLOWING AUTHORS AND EDITORS

JAMES LAUGHLIN HUGHES

A. MELVILLE SCOTT, A. B., PH. D.

CHARLES A. MCMURRY, PH. D.

PHILANDER PRIESTLY CLAXTON, M. A., LITT. D.

ALICE G. MCCLOSKEY

THOMAS E. CLARKE, A. B., PAED. B.

VOLUME TWO

30294
10/12/13

SCHOOL METHODS COMPANY

TORONTO

CHICAGO



Copyright, 1908, 1913: HANSON-BELLOWS Co.
All rights reserved

Authors and Editors of Public School Methods

JAMES LAUGHLIN HUGHES,
Chief Inspector of Schools, Toronto, Ontario
Editor-in-Chief

A. MELVILLE SCOTT, A.B., PH.D.
Superintendent of Schools, Calgary, Alberta

CHARLES A. McMURRY, PH.D.
Director of Training School, Northern Illinois State Normal
School; Superintendent City Schools, De Kalb, Ill.

PHILANDER PRIESTLY CLAXTON, M.A., LITT.D.
United States Commissioner of Education, Washington, D. C.

ALICE G. McCLOSKEY,
Associate Director Rural School Education Extension, New
York State College of Agriculture, Editor Cornell
Rural School Leaflets, Cornell Univer-
sity, Ithaca, New York

THOMAS E. CLARKE, A.B., PAED. B.
Principal, Elgin Street School, Ottawa, Ontario

Twenty-Five Type Studies on Reading, Geography, Scientific Agriculture and History

Reading

CINDERELLA

BAREFOOT BOY

Geography

LAKE MICHIGAN

PANAMA CANAL

MOUNT SHASTA

CANADIAN PACIFIC RAILWAY

COAST OF NORWAY

STEAMSHIP VOYAGE FROM

ST. PETERSBURG

MONTREAL TO BRISTOL,

ENGLAND

NEW ORLEANS

ROCKY MOUNTAINS PARK

Scientific Agriculture

CORN

IRRIGATION IN THE NORTH-

COTTON

WEST

COFFEE

History

COLUMBUS

BURGOYNE'S INVASION

IROQUOIS INDIANS

WAR OF 1812

THE PURITANS

LAURA SECORD

UNION JACK

STEAMSHIP TRAFFIC ON THE

STRUGGLE BETWEEN THE

ST. LAWRENCE

ENGLISH AND FRENCH

BRITISH COLONIES

FOR NORTH AMERICA

CONTENTS

CHAPTER ONE

GEOGRAPHY AND HISTORY

GEOGRAPHY

	PAGE
1. PLACE OF GEOGRAPHY IN PRIMARY GRADES.....	I
2. GEOGRAPHIC MATERIAL.....	I
(a) Selection.....	2
(b) Presentation.....	2
3. THE TEACHER'S PREPARATION.....	3
(a) General.....	3
(b) Special.....	5
4. OUTDOOR STUDIES.....	5
5. THE STUDY OF TYPES.....	6
(a) Importance.....	6
(b) Method.....	7
6. THE POTATO.....	8
(a) Purpose of Lesson.....	8
(b) Preparatory Work.....	8
(c) The Potato Plant.....	9
(d) Experiments and Observations.....	9
(e) History.....	10
(f) Value of the Crop in Canada.....	10
(g) Chief Potato Producers.....	10
(h) Uses.....	10
(i) Varieties.....	11
(j) Items of Interest.....	11
(k) Questions.....	11
7. A BROOK BASIN.....	11
(a) Plan.....	11
(b) Method.....	12
8. THE WIND.....	13
(a) Purposes of the Lesson.....	13
(b) Preparation or Introduction.....	13
(c) Presentation.....	13
(d) Suggestive Questions.....	14
(e) The Four Winds.....	14
(f) Selections for Memorizing.....	15
(g) Stories.....	16
(h) Hand Work.....	16

	PAGE
9. OSTRICH FARMING.....	16
(a) The Ostrich.....	16
(b) Ostrich Taming.....	17
(c) Ostrich Farms.....	17
(d) The Cawston Farm.....	18
(e) Plucking.....	18
(f) Items of Interest.....	18
10. REVIEWS.....	19
11. WORK FOR THE FIRST AND SECOND GRADES.....	20
(a) Plants and Animals.....	20
(b) Study of the Weather.....	20
(c) The Study of Material.....	22
12. WORK FOR THE THIRD GRADE.....	23
(a) Nature Study.....	23
(b) Maps.....	25
(c) Climate.....	25
(d) Surface.....	26
(e) Drainage.....	27
(f) Products.....	27
(g) Occupations.....	27
(h) Means of Travel.....	27
(i) Public Buildings.....	27
(j) Course of Study.....	28
(k) Preparation for the Text-Book.....	28
13. SUGGESTIVE LESSONS FOR PRIMARY PUPILS.....	28
(a) Snow.....	28
(b) The Sun.....	28
(c) Occupations.....	28
14. SUGGESTIVE LESSONS FOR THIRD GRADE.....	28
(a) Market Gardening.....	28
(b) Visit to a Creamery.....	29
(c) Farming.....	29
(d) Foods.....	29
HISTORY	
15. RELATION OF GEOGRAPHY TO HISTORY.....	30
16. MODES OF TRAVEL.....	30
(a) Purpose of Lesson.....	30
(b) Method.....	30
(c) Objects for Study.....	31
(d) History.....	31
17. INDIAN LIFE: THE STORY OF HIAWATHA.....	32
(a) Introduction.....	32
(b) The Indian's Dress.....	33
(c) The Houses.....	33

Contents

vii

	PAGE
(d) The Indian Baby.....	34
(e) Work.....	34
(f) Modes of Transportation.....	35
(g) Indian Amusements.....	35
18. BOOKS FOR TEACHERS.....	35
TEST QUESTIONS.....	36

CHAPTER TWO

CONSTRUCTION WORK

INTRODUCTION

1. EDUCATIONAL VALUE.....	37
2. ADAPTABILITY OF THE COURSE.....	37
3. MATERIALS.....	37
4. RELATIVE VALUE OF RESULTS.....	38
5. THE TEACHER'S PREPARATION.....	38

FIRST YEAR

6. PAPER CUTTING.....	39
(a) Material.....	39
(b) Method.....	39
(c) Work to be Accomplished.....	39
7. PRELIMINARY EXERCISES.....	40
(a) Definitions.....	40
(b) Exercises.....	40
8. FRUITS, VEGETABLES AND ANIMAL FORMS.....	43
9. THANKSGIVING DINNER TABLE.....	44
10. FURNITURE AND UTENSILS; CHRISTMAS TREE ORNAMENTS ..	45
(a) Furniture and Utensils.....	45
(b) Christmas Tree Ornaments, Toys.....	45
11. THE HOUSE.....	45
12. SPRING WORK.....	46
13. EXERCISES IN STITCHING.....	46
14. AUTUMN WORK.....	47
(a) Book.....	47
(b) Envelope.....	48
(c) Paper Napkins.....	48
(d) Bean Bag.....	48
(e) Holder.....	49
(f) Penwiper.....	49
15. CHRISTMAS TREE ORNAMENTS.....	49
(a) Lanterns.....	49
(b) Cornucopias.....	50
(c) Paper Chains.....	50
(d) Stars.....	50

	PAGE
16. TRIANGULAR BOX.....	50
17. MATCH SCRATCHER.....	51
18. VALENTINES.....	51
19. EASTER EGGS.....	52
20. MAY BASKETS.....	52
21. COVER FOR DRAWINGS.....	52

SECOND YEAR

22. INTRODUCTORY.....	53
23. FRUITS AND VEGETABLES.....	53
24. TREES.....	53
25. PURITAN POSTER.....	53
26. VILLAGE.....	53
27. SANTA CLAUS.....	54
28. CHRISTMAS TREE POSTER.....	54
29. WINTER SPORTS.....	54
30. POSES AND GAMES.....	55
31. BOOKS FOR SEEDS.....	55
32. PUMPKIN MASKS.....	56
33. BRAIDING AND CORDING RAFFIA.....	56
(a) Braiding.....	56
(b) Cording.....	58
34. COLONIAL CRADLE.....	58
35. RAFFIA NAPKIN RING.....	58
36. WOVEN HOLDER.....	59
37. SEWING BAG.....	59
38. SCREEN.....	60
39. SOLDIER'S CAP.....	61
40. TABLE.....	63
41. CHAIR.....	63
42. BED.....	64
43. VALENTINES.....	64
44. EASTER RABBIT.....	64
45. BOOKS FOR QUOTATIONS.....	64
46. BOOKS OF FLOWERS.....	65

THIRD YEAR

47. INTRODUCTORY.....	65
48. ANIMALS AND FIGURES.....	65
49. WAGONS AND PARADE.....	66
50. SANTA CLAUS.....	66
51. GARDENING.....	66
52. THE FARM.....	66
53. ENVELOPE.....	69

Contents

ix

	PAGE
54. BOOK OF TREES.....	69
55. BOOK OF LEAVES.....	69
56. THANKSGIVING DINNER CARDS.....	70
57. POST CARD ALBUM.....	70
58. SLED.....	71
59. PICTURE FRAME.....	71
60. FLOWER POT COVER.....	72
61. WOVEN PURSE.....	72
62. THE SQUARE BOX.....	73
63. VALENTINES.....	73
64. EASTER GREETINGS.....	74
65. KITE.....	74
66. MAY BASKET.....	75
67. BOOK OF BIRDS.....	75
68. ADDITIONAL FOLDINGS.....	75
(a) The Handkerchief Case.....	75
(b) Picture Frame.....	75
(c) The Boat.....	77
(d) The Box.....	77
(e) The Windmill.....	77
69. DOLL'S HOUSE.....	77
(a) The Seat.....	77
(b) The Bureau or Sideboard.....	77
(c) The Stove.....	79
TEST QUESTIONS.....	79

CHAPTER THREE

DRAWING

INTRODUCTION

1. AIM OF THE LESSONS.....	80
2. ARRANGEMENT OF PLAN.....	80
3. MATERIALS.....	81
(a) Paper.....	81
(b) Pencils.....	81
(c) Crayons.....	82
(d) Water Colors.....	82
(e) Brushes.....	82
(f) Water Color Pan.....	82
(g) General Care of Materials.....	82
4. SUPPLIES AND SUPPLY HOUSES.....	83

SEPTEMBER		PAGE
5. FIRST WEEK.....		84
(a) Decorating the Schoolroom.....		84
(b) Lessons in Color.....		84
(c) Use of Water Colors.....		85
6. SECOND WEEK.....		86
(a) Free Illustration.....		86
(b) Figure Drawing.....		88
7. THIRD WEEK.....		90
(a) Study of Grasses.....		90
(b) Memory Drawings.....		90
8. FOURTH WEEK.....		90
(a) Flower Painting.....		90
(b) Memory Lessons.....		92
(c) Exhibits.....		93
TEST.....		93
OCTOBER		
9. NATURE WALKS.....		94
10. FIRST WEEK.....		94
(a) Autumn Weeds.....		94
(b) Seat Work.....		96
11. SECOND WEEK.....		96
(a) Autumn Leaves.....		96
(b) Book Cover.....		98
12. THIRD WEEK.....		98
(a) Trees.....		98
(b) Landscape.....		99
(c) Illustrating a Poem.....		99
13. FOURTH WEEK.....		99
(a) Fruits.....		99
(b) Modeling.....		100
TEST.....		101
NOVEMBER		
14. PREPARATORY WORK.....		102
15. FIRST WEEK.....		102
(a) Fruits and Vegetables.....		102
(b) Cutting and Modeling.....		104
16. SECOND WEEK.....		104
(a) Outdoor Studies.....		104
(b) Illustrate Reading Lessons.....		104
17. THIRD WEEK.....		106
Special Events.....		106

Contents

xi

	PAGE
18. FOURTH WEEK.....	106
Preparation for Thanksgiving.....	106
TEST.....	108

DECEMBER

19. NATURE AND PICTURE STUDY.....	110
20. FIRST WEEK.....	110
Winter Sports.....	110
21. SECOND WEEK.....	112
Winter Landscape.....	112
22. THIRD WEEK.....	114
Preparations for Christmas.....	114
TEST.....	116

JANUARY

23. FIRST WEEK.....	116
Toys.....	116
24. SECOND WEEK.....	118
(a) Object Drawing.....	118
(b) The Pencil.....	118
25. THIRD WEEK.....	118
Object Drawing (Continued).....	118
26. FOURTH WEEK.....	120
Object Drawing (Continued).....	120
TEST.....	122

FEBRUARY

27. PREPARATION FOR SPECIAL DAYS.....	122
28. FIRST WEEK.....	124
Receding Lines.....	124
29. SECOND WEEK.....	126
(a) Perspective.....	126
(b) Lincoln's Birthplace.....	127
(c) Valentines.....	127
30. THIRD WEEK.....	127
The Canadian Flag.....	127
31. FOURTH WEEK.....	128
Illustrated Stories.....	128
TEST.....	128

MARCH

32. THE MONTH OF AWAKENING.....	129
33. FIRST WEEK.....	129
(a) Illustrated Poems.....	129
(b) Paper Cutting.....	130

	PAGE
34. SECOND WEEK.....	130
Birds and Branches.....	130
35. THIRD WEEK.....	132
Studies in Figures.....	132
36. FOURTH WEEK.....	132
(a) Outdoor Studies.....	132
(b) Picture Study.....	134
TEST.....	134

APRIL

37. SPRINGTIME.....	134
38. FIRST WEEK.....	136
(a) A Study in Birds.....	136
(b) Bird Booklet.....	136
39. SECOND WEEK.....	136
Garden Scenes.....	136
40. THIRD WEEK.....	138
Spring Landscape.....	138
41. FOURTH WEEK.....	138
(a) Spring Flowers.....	138
(b) May Baskets.....	140
TEST.....	140

MAY

42. ANIMAL LIFE.....	140
43. FIRST WEEK.....	142
(a) Study of Animals.....	142
(b) Designs.....	142
44. SECOND WEEK.....	144
Stained Glass Effects.....	144
45. THIRD AND FOURTH WEEKS.....	144
Articles for the Home.....	144
TEST.....	146

JUNE

46. THE ANNUAL EXHIBITION.....	148
47. FIRST WEEK.....	148
Invitations.....	148
48. SECOND WEEK.....	150
(a) Out Door Studies.....	150
(b) Animal Studies.....	150
(c) Flags.....	150
49. THIRD WEEK.....	150
(a) Art Portfolio.....	150
TEST.....	151

Contents

xiii

PAGE

PICTURE STUDY

50. VALUE.....	151
51. METHOD.....	152
52. SELECTION OF PICTURES.....	152
(a) French Artists.....	152
(b) English Artists.....	153
(c) American Artists.....	153
(d) Dutch Artists.....	153
(e) Flemish Artists.....	153
(f) German Artists.....	153
(g) Spanish Artists.....	153
(h) Italian Artists.....	153
53. AIDS.....	153
(a) Text-Books.....	153
(b) Magazines.....	153

CHAPTER FOUR

SPELLING AND PENMANSHIP

SPELLING

1. WHAT SPELLING INCLUDES.....	154
2. PREPARATORY WORK.....	155
3. ORAL AND WRITTEN SPELLING.....	155
4. THE FIRST LESSONS.....	156
5. HOW MUCH TO SPELL.....	157
6. PLAN FOR WRITTEN SPELLING.....	157
7. DEFICIENT CHILDREN.....	159
8. HOW TO STUDY SPELLING LESSONS.....	160
9. VISUALIZATION.....	162
10. VALUE OF THE IMAGING POWER.....	163
11. THE LAW OF ASSOCIATION.....	163
12. SPELLING AND DRAWING.....	164
13. SPELLING IN SENTENCES.....	164
14. RULES FOR TEACHERS.....	165

PENMANSHIP

15. LEARNING TO READ WRITING.....	166
16. WHAT PENMANSHIP INCLUDES.....	167
17. SENSE TRAINING AIDS PENMANSHIP.....	167
18. OBJECTS SOUGHT.....	167
19. THE TEACHER'S PREPARATION.....	168
20. POSITION.....	169
21. FORM.....	169
22. DEVICES FOR TEACHING FORMS.....	169

	PAGE
23. MOVEMENT.....	170
24. MATERIAL.....	171
(a) Crayon.....	171
(b) Pencils.....	171
(c) Paper.....	171
(d) Pen and Ink.....	172
25. RULING AND RULERS.....	172
26. WRITING ON THE BLACKBOARD.....	173
(a) By the Teacher.....	173
(b) By the Pupils.....	174
27. SEAT LESSONS.....	174
28. PLAN OF WORK.....	175
29. CAUSES OF TROUBLE.....	177
30. PATIENCE AND PERSISTENCE.....	177
31. CAUSES OF POOR WRITING.....	177
32. TIME FOR LESSON.....	177
33. UNIFORMITY OF HANDWRITING.....	178
34. EXHIBITION OF PENMANSHIP.....	178
35. HOW MUCH TO DO.....	179
36. DRILL EXERCISES AND COUNTING.....	179
37. AIDS.....	182
TEST QUESTIONS.....	182

CHAPTER FIVE

PHYSIOLOGY

1. THE TEACHER'S PREPARATION.....	184
2. PURPOSE OUTLINED.....	184
3. HYGIENIC RESULTS EXPECTED.....	185
4. CORRELATION WITH OTHER SUBJECTS.....	186
(a) Nature Study.....	186
(b) Reading, Spelling and Language.....	187
(c) Arithmetic.....	187
(d) Elementary Geography.....	187
(e) Sense-Training.....	188
5. METHOD OF PROCEDURE.....	188
6. THE EARLIEST LESSONS.....	189
7. PARTS OF THE BODY.....	191
(a) Main Divisions of the Body.....	191
(b) Location of Main Divisions.....	191
8. ILLUSTRATIVE LESSON.....	191
9. PARTS OF THE HEAD.....	192
Location of Parts of the Head.....	192

Contents

XV

PAGE

10. THE EYES.....	193
(a) Parts that Protect the Eyes.....	193
(b) The Location of Protective Parts of the Eye	193
(c) Visible Parts of the Eye.....	194
(d) Location of Parts of the Eye.....	194
(e) Care of the Eye.....	194
11. THE NOSE.....	196
(a) The Parts of the Nose.....	196
(b) Location of Parts of the Nose.....	196
(c) Care of the Nose.....	196
12. THE MOUTH.....	196
(a) Parts of the Mouth.....	196
(b) Location of Parts of the Mouth.....	196
13. THE EARS.....	197
(a) Parts of the Ear.....	197
(b) Location of Parts of the Ear	197
(c) Care of the Ear.....	198
14. THE FINGER NAILS.....	199
15. THE SKIN.....	200
16. PARTS OF THE NECK AND TRUNK.....	201
(a) Parts of the Neck.....	201
(b) Parts of the Trunk.....	202
17. THE LIMBS.....	202
(a) Parts of Upper Limbs or Arms.....	202
(b) Parts of the Hand.....	202
(c) Names of the Fingers.....	202
(d) Parts of the Foot.....	202
18. THE JOINTS.....	202
(a) Joints of Upper Limbs or Arms.....	202
(b) Joints of Lower Limbs or Legs.....	202
(c) Plan.....	202
19. HAND AND FOOT.....	203
20. THE BONES.....	204
(a) Plan.....	204
(b) Bones of the Head.....	204
(c) Bones of the Trunk.....	204
(d) Bones of Arm and Hand.....	204
(e) Bones of Leg and Foot.....	205
21. THE BLOOD.....	205
22. WASTE AND REPAIR.....	205
(a) Agencies that Wear and Waste.....	205
(b) Agencies that Repair and Rebuild.....	206
23. CORRELATED LITERATURE.....	206
24. TEMPERANCE PHYSIOLOGY.....	206
TEST QUESTIONS.....	209

CHAPTER SIX

Music

1. THE AIM OF MUSIC IN THE PUBLIC SCHOOLS	211
2. MATERIAL.....	212
3. CARE OF THE CHILDREN'S VOICES.....	212
(a) Rules.....	212
(b) Suggestions.....	213
4. GENERAL PRINCIPLES OF METHODS.....	213
5. IMITATION.....	214
(a) The Rote Song.....	214
(b) Uniting the Voices.....	215
6. RECOGNITION OF TONE.....	216
7. REPRESENTATION OF TONE.....	218
8. RECOGNITION OF RHYTHM.....	220
9. REPRESENTATION OF RHYTHM.....	221
10. INTERPRETATION.....	222
(a) Definition.....	222
(b) Methods.....	223
11. ORDER OF DEVELOPMENT.....	224
(a) The Natural Process.....	224
(b) Syllabus for First Three Years.....	226
12. GENERAL SUGGESTIONS.....	230
13. HELPFUL BOOKS FOR TEACHERS.....	231
(a) Primary Rote Songs.....	231
(b) First Steps in Music Training.....	231
(c) Graded Music Courses.....	231
(d) For Mixed Grades.....	232
(e) Charts.....	232
TEST QUESTIONS.....	232

CHAPTER SEVEN

THE USE OF THE SENSES

1. FUNCTION OF THE SENSES.....	233
2. RELATION OF THE SENSES AND KNOWLEDGE.....	233
3. NECESSITY FOR USE OF THE SENSES.....	234
4. DEFECTIVE SENSE-ORGANS.....	234
(a) Testing the Ear.....	235
(b) Testing the Eye.....	236
(c) Right Conditions.....	236
5. FACTS CONCERNING THE SENSES.....	237
(a) Development of the Sense-Organs.....	237
(b) The Functions of Each Sense.....	237
(c) All the Senses Must Be Used.....	238
(d) Proper Physical Conditions.....	238

Contents

xvii

	PAGE
6. THE SENSE FACTOR IN ALL LESSONS.....	238
(a) Reading.....	239
(b) Writing.....	239
(c) Number.....	240
(d) Geography.....	241
(e) History.....	243
(f) Drawing.....	244
(g) Nature Study.....	245
7. IMPORTANCE OF INDIRECT SENSE TRAINING.....	245
8. BOOKS FOR TEACHERS.....	246
TEST QUESTIONS.....	246

CHAPTER EIGHT

MORAL TRAINING

INTRODUCTION

1. NECESSITY FOR MORAL TRAINING.....	248
(a) Disregard for Law.....	248
(b) Lack of Home Training.....	249
(c) Lack of Knowledge of Right and Wrong.....	249
(d) Legal Requirements.....	249
(e) Public Opinion.....	249
2. FACTORS IN THE PROBLEM.....	250

INTERNAL AGENCIES

3. NATURE OF A MORAL ACT.....	250
4. HEREDITY	250
5. EMOTIONS.....	251
6. THE WILL.....	251
7. EXPERIENCES.....	252
8. IDEALS.....	252

EXTERNAL AGENCIES

9. IMPORTANCE.....	252
10. THE HOME.....	253
11. SOCIETY.....	254
(a) The Street.	254
(b) The Gang..	255
(c) Other Organizations.....	255
12. SCHOOLHOUSE AND GROUNDS.....	256
13. THE SCHOOLROOM.....	256
14. THE SCHOOL.....	257
15. REVERENCE FOR LAW.....	258
16. THE TEACHER.....	258

METHODS

17. UNDERLYING PRINCIPLES.....	259
18. MAKE A GOOD BEGINNING.....	260

	PAGE
19. THE GENERAL SCHOOL REGIME.....	260
20. SPECIAL LESSONS.....	261
21. POLITENESS.....	262
(a) At School.....	262
(b) At Home.....	263
22. KINDNESS.....	264
(a) Schoolmates and Friends.....	264
(b) Animals.....	265
(c) Plants.....	266
23. REVERENCE.....	266
24. PROMPTNESS.....	267
25. OBEDIENCE.....	268
26. RESPONSIBILITY.....	269
27. TRUTHFULNESS.....	271
(a) Lying.....	271
(b) Exaggeration.....	273
(c) Prevarication.....	273
(d) Slander.....	274
28. HONESTY.....	274
29. INDUSTRY.....	276
30. CONDUCT.....	277
31. SELF-CONTROL.....	279
32. LOVE OF COUNTRY.....	280
33. PUPIL GOVERNMENT.....	280
34. AIDS.....	283
TEST QUESTIONS.....	284

CHAPTER NINE

THE SCHOOL AND ITS ENVIRONMENT

1. INTRODUCTION.....	285
2. THE PROBLEM.....	286
3. THE SCHOOLHOUSE.....	286
(a) Seats.....	287
(b) Heating Apparatus.....	288
(c) Ventilation.....	289
(d) Points to Remember.....	290
(e) Lighting.....	291
(f) Condition of the Building.....	291
4. THE SCHOOL FURNITURE.....	292
(a) The Work Table.....	293
(b) The Sand Box.....	293
(c) The Blackboard.....	293
5. THE SCHOOL GROUNDS.....	294

Contents

xix

	PAGE
6. THE PATRONS.....	296
7. THE SCHOOL OFFICIALS.....	297
8. THE SUPERINTENDENT, INSPECTOR OR DIRECTOR.....	298
9. THE PUPILS.....	300
10. THE TEACHER.....	301
(a) Character.....	301
(b) Personal Appearance.....	302
(c) Qualifications.....	303
(d) Responsibility.....	303
11. REQUIREMENTS.....	304
TEST QUESTIONS.....	305

CHAPTER TEN

SCHOOL MANAGEMENT

1. IMPORTANCE.....	307
2. GENERAL MATTERS.....	307
(a) Janitor Service.....	307
(b) Lunches.....	307
(c) Mothers' Meetings.....	308
3. EMERGENCIES.....	308
(a) Accidents.....	308
(b) Inclement Weather.....	309
(c) Precautions Against Fire.....	310
(d) Contagious Diseases.....	310
4. APPARATUS.....	312
(a) Pointers.....	312
(b) Erasers.....	312
(c) Blackboard Curtain.....	313
(d) Charts.....	313
(e) Other Apparatus.....	314
5. BOOKS AND PERIODICALS.....	314
6. DECORATIONS.....	316
(a) Color Scheme.....	317
(b) Borders.....	317
(c) Pictures.....	317
(d) Other Decorations.....	320
7. ORGANIZATION.....	321
8. HELPERS.....	322
9. PROGRAM.....	322
(a) Points to be Considered.....	322
(b) Grades in a Room.....	323
(c) Other Considerations.....	324
10. RECESSES.....	324

	PAGE
11. WORK FOR PUPILS NOT RECITING.....	325
12. THE FRIDAY PROGRAM.....	327
13. SPECIAL DAYS.....	328
14. THE RECITATION.....	329
(a) Purpose.....	329
(b) The Plan.....	329
(c) The Teacher's Preparation.....	332
15. QUESTIONING.....	333
(a) Characteristics.....	333
(b) Distribution.....	334
(c) Answers.....	335
16. REVIEWS AND EXAMINATIONS.....	336
(a) Reviews	336
(b) Examinations.....	336
17. THE AMOUNT OF WRITTEN WORK.....	337
18. MARKING PAPERS.....	337
19. CHOOSING METHODS.....	339
20. ORDER OF PROCEDURE.....	340
21. HABITS OF MENTAL WORK.....	341
TEST QUESTIONS.....	343

ILLUSTRATIONS

	PAGE
JOHANN HEINRICH PESTALOZZI. <i>Halftone</i>	<i>Frontispiece</i>
BLACKBOARD SKETCHES.....	4
THE OSTRICH. <i>Color Plate</i>	16
DESIGN FOR BLACKBOARD CALENDAR.....	21
DESIGN FOR BLACKBOARD CALENDAR.....	22
SPRING FLOWERS.....	24
WHAT HIAWATHA SAW IN HIS CHILDHOOD. <i>Halftone</i>	32
FIRST YEAR PAPER CUTTING:	
PEAR, CARROT AND DUCK. Fig. 1.....	44
ARTICLES OF FURNITURE. Fig. 2.....	45
HEN AND CHICKENS. Fig. 3.....	46
METHOD OF SEWING BOOKLET. Fig. 4.....	48
ENVELOPE. Fig. 5.....	48
PENWIPER. Fig. 6.....	49
LANTERN. Fig. 7.....	50
SIX-POINTED STAR. Fig. 8.....	50
TRIANGULAR BASKET. Fig. 9. MAY BASKET. Fig. 10.....	51
DESIGNS FOR COVER. Figs. 11 and 12.....	52
SECOND YEAR PAPER CUTTING:	
FRUIT AND VEGETABLE. Fig. 13.....	53
TREES. Fig. 14.....	54
CHILDREN POSING. Fig. 15.....	55
DESIGN FOR BOOK OF SEEDS. Fig. 16.....	55
PUMPKIN MASK. Fig. 17.....	56
COLONIAL CRADLE. Fig. 18.....	57
RAFFIA NAPKIN RING. Fig. 19.....	58
PICTURE FRAME AND HOLDER. Fig. 20. <i>Halftone</i>	59
TABLE. Fig. 21.....	60
CHAIR. Fig. 22.....	61
BED. Fig. 23.....	62
EASTER RABBIT. Fig. 24.....	63
DECORATION FOR BOOK OF MEMORY GEMS. Fig. 25.....	64
ALPHABET.....	65
DECORATION FOR BOOK OF FLOWERS. Fig. 26.....	66
THIRD YEAR PAPER CUTTING:	
FARM SCENE. Fig. 27.....	67
SANTA CLAUS. Fig. 28.....	68
GARDENING. Fig. 29.....	68
PATTERN FOR ENVELOPE. Fig. 30.....	69
THANKSGIVING DINNER CARD. Fig. 31.....	70
PATTERN FOR SLED. Fig. 32.....	71
RAFFIA PICTURE FRAME. Fig. 33.....	72

	PAGE
FLOWER POT COVER. Fig. 34.....	72
WOVEN PURSE. Fig. 35. <i>Halftone</i>	73
VALENTINE. Fig. 36.....	73
VALENTINES. Fig. 37.....	74
EASTER EGG. Fig. 38.....	74
PAPER FOLDING. Fig. 39.....	76
PAPER FOLDING—DOLLS' FURNITURE. Fig. 40.....	78
FIGURES EXPRESSED BY STRAIGHT LINES.....	87
FIGURE PAINTING IN WATER COLOR OR INK WORK.....	89
GRASS STUDIES IN PENCIL, CRAYON OR BRUSH WORK.....	91
STUDIES OF SEED PODS, IN WATER COLOR OR INK.....	95
TREE STUDIES, IN WATER COLOR OR INK.....	97
STUDY OF FRUIT BRANCH, IN BLACK WATER COLOR OR INK.....	103
DESIGN FOR THE STORY OF LITTLE AGOONACK.....	105
THE HOME OF HIAWATHA.....	107
THE STORY OF THE THREE BEARS.....	109
CONVENTIONALIZED UNITS, TO DECORATE OBJECTS MADE BY PUPILS.....	111
PATTERN OF PORTFOLIO, WITH SUGGESTED UNITS FOR A DESIGN.....	113
PATTERN AND DESIGNS FOR SQUARE BOX.....	115
CHRISTMAS TOYS BRING CHILDREN'S JOYS.....	117
APPEARANCE OF DRUM IN DIFFERENT POSITIONS.....	119
APPEARANCE OF BASKET IN DIFFERENT POSITIONS.....	121
CRAYON WORK. <i>Halftone</i>	123
STUDIES OF FAMILIAR OBJECTS IN SILHOUETTE EFFECTS.....	123
RECEDING LINES AND OBJECTS IN PERSPECTIVE.....	125
ILLUSTRATING THE WEEK'S WORK, BY CHILDREN POSING.....	131
FIGURE PAINTING IN SILHOUETTE—CHILDREN'S WORK.....	133
ILLUSTRATING CHILDREN'S GAMES—CHILDREN'S WORK.....	135
SPRING BUDS AND FLOWERS; DESIGN FOR SPRING BOOKLETS.....	137
ULYSSES PLOWING—FIRST GRADE WORK.....	139
ANIMAL STUDIES IN CRAYON.....	141
LEAVING THE HILLS. <i>Halftone</i>	142
CONVENTIONALIZED DESIGNS.....	143
SPRING FLOWERS, IN WATER COLOR OR INK WORK.....	145
PAPER TEARING—CHILDREN'S WORK.....	147
CIRCUS DAY MEMORIES—CHILDREN'S WORK.....	149
FEEDING HER BIRDS. <i>Halftone</i>	153
SIR GALAHAD. <i>Halftone</i>	318

COLOR PLATES IN DRAWING LESSON

PLATE I	AUTUMN FOLIAGE	PLATE V	DRUM
PLATE II	AUTUMN LANDSCAPE	PLATE VI	GIRL POSING
PLATE III	PUMPKIN	PLATE VII	TULIP
PLATE IV	JAPANESE LANTERN	PLATE VIII	CHICKENS

CHAPTER ONE

GEOGRAPHY AND HISTORY

GEOGRAPHY

1. Place of Geography in Primary Grades. Most of the geography teaching in primary grades is incidental and indirect. The exception is in those schools whose courses of study require a period a day to be devoted to this subject in the third grade. But even here the teaching is liable to be indirect; that is, its chief purpose is to prepare the pupils for the formal study of geography in the next grade, which is done by directing the lessons in nature study and some language lessons to this end. In first and second grades no direct reference to geography is made. The nature study lessons, however, bring numerous geographical facts and phenomena to the attention of the pupils. For instance, lessons on plants lead to some knowledge of the places in which they grow, and casually call attention to the seasons. Plants begin to grow in the spring; they mature in summer, ripen in autumn and sleep (rest) through the winter. Similar facts are brought out in the study of animals. The study of the uses to which plants and animals are put leads to some discussion of our needs and how they are supplied.

The teacher of the first and second grades should have in mind the geography work of the grades above, and should so direct nature lessons as to have them lead up to this work by natural and easy steps. The method for doing this has been fully illustrated in the lessons on *Nature Study*, in Volume One. This lesson, therefore, has to do chiefly with the work of the teacher in the third grade.

2. Geographic Material. The teacher must select her geographic material with extreme care. Third grade children are not interested in the study of details, consequently simple subjects should be selected, and in the study of these only the most striking features should be noticed.

(a) **SELECTION.** The work of this grade should be devoted almost entirely to home geography. Fruitful topics for discussion, topics with which the children are already somewhat familiar, are the weather, the seasons, the length of day and night in summer and winter, food plants grown in the vicinity, or found in the market, articles of food and clothing obtained from other localities, the occupations of the neighborhood, wind, rain and snow, and the relief of the region about the school, as brook basins, hills, plains, valleys, etc.

This list of topics is suggestive of what may be used, but the selection should be varied to meet local conditions. The teacher in a rural school or a small town can do more with the study of relief forms than can the teacher in a city, while the latter can do more with occupations than the teacher in the country.

(b) **PRESENTATION.** In arranging her material for lessons, the teacher should be guided by the following principles of presentation:

(1) *Correctness.* The articles used should be genuine, not imitations; or, if pictures are used, they should give a correct representation of the object. The illustrations should be true to life; that is, they should conform to the facts associated with the subject of the lesson.

(2) *Regard for the Human Element.* The geography lessons in this grade should place particular emphasis upon the relation of the subjects studied to our daily life and needs. Home geography affords ample opportunity for this line of work. In the study of remote regions or foreign countries, this can be done by having the studies center around the people of the region.

(3) *Knowledge at First Hand.* So far as possible the pupils should obtain their knowledge of geographic facts by observation, hence the great importance of selecting home material for the first lessons. This observation should be directed by the teacher, who should ask the children to look for the particular things which she wants them to see.

The teacher may also give additional facts when the pupils have learned what they can by their own observation. The teacher should be careful, however, in giving additional information, that she does not carry the subject beyond the pupils' understanding. She should look at the subject from their point of view, rather than from her own.

3. The Teacher's Preparation. The teacher's preparation for the geography work of this grade may be considered under two heads—general and special.

(a) **GENERAL.** The general preparation consists first of all in acquiring such a knowledge of the subjects to be presented as will enable the teacher to make them interesting to the children. Along with this knowledge, a general idea of the subject as a whole, and of the work for each term and the entire year, should be gained. Otherwise the teacher will not be able properly to relate the lessons to the geography work of the grade.

The second step in general preparation consists in acquiring such skill in the use of the crayon and the pencil as will enable the teacher to draw simple sketches on the black-board or on paper. Ability to do this adds much to one's success in teaching geography. Elaborate drawings are not desirable. The following sketches show what may be used to excellent advantage, and any teacher can, by a little practice, acquire sufficient skill to enable her to make sketches of this kind.

The third step is the collection of material. The geography teacher should gather and constantly have on hand a stock of material specially adapted to the work of the grade in which she is giving instruction. One of the most valuable portions of this material will be pictures which she can secure from magazines, daily papers and many other sources. Especially helpful are the pictures obtained from circulars distributed by the large railway and steamship companies. Descriptive catalogues of large manufacturing firms and other leading wholesale and retail establishments also contain a great deal of material that can be used. Picture postal



BLACKBOARD SKETCHES

cards are so common and inexpensive that they also can be made to contribute largely to this collection. Samples of raw material, from which clothing and other articles in common use are made, is also of great value in giving the

children first hand knowledge, and in lending interest to the work. The school which has a cabinet of such material, supplemented by collections of minerals, insects and woods, is fortunate.

Both pupils and teacher can assist in collecting all the material here suggested. It should all be classified and arranged on a systematic plan, so that whatever is needed can be obtained without waste of time.

(b) **SPECIAL.** The teacher's special plans will consist in the selection of subjects for daily lessons, and the planning of each lesson. In selecting geography subjects for primary grades, the teacher should be guided by (1) the adaptation of the subject to the capacity of the children, (2) its adaptation to the season of the year, (3) its ability to be easily related to other departments. To illustrate: the lessons in nature study are easily related to geography. They are also closely related to drawing and language, and occasionally to number lessons. Frequently subjects, otherwise equally proper, might be selected for primary grades were it not for the fact that they are of such nature that they are not easily related to the other work of the school. It is usually wise to omit such subjects. The preparation for the lesson should include the selection of the subject for the lesson, and a thorough study of the subject for the purpose of presenting it to the class so as to bring out the desired points. This study should include the general line of questioning necessary to lead the class to discover the desired facts and principles. In addition to this, the teacher should prepare to give one or more interesting facts or incidents, to relate an anecdote or read or repeat a short poem or other literary selection especially suited to the lesson.

4. Outdoor Studies. Since all the geography lessons in the primary grades have to do with the immediate neighborhood, the lessons can often be made more effective by taking the class to the place where the object under consideration can be studied. So far as possible, objects near the school should be selected, but sometimes in cities and

large towns a trip of several blocks is necessary. Because of the danger incurred, trips to factories and machine shops are not recommended for primary grades.

When an outdoor study is decided upon, it should be carefully planned by the teacher, who should direct the children's attention to points which she wishes them to observe. The trip should always be followed by a discussion in class, in which each pupil should be called upon to state what he learned. The teacher should not be discouraged if these first attempts are seemingly failures. She will find that one child saw one thing and another another, notwithstanding the fact that the attention of the class was directed to the same objects. However, by putting together the points brought out by the various pupils, a connected and reasonably systematic account will be obtained. This should be re-stated to the class by the teacher in such a manner that all can remember it, and from day to day it should be called up until each pupil is able to give a connected account of what was learned during the trip.

Caution. In reviewing the excursion, after the first lesson only a few moments of each recitation should be given to it; otherwise, the children will become tired of the subject and lose interest.

5. The Study of Types. (a) **IMPORTANCE.** Outdoor studies bring us to an important phase of geography teaching. This is the study of a few objects or phenomena as types of the classes which they represent. The multitude of subjects contained in geography precludes even so much as the briefest consideration of many; therefore others, especially those that, on account of their relation to the subject as a whole, are the most important, must be selected for study. The study of one river from its source to its mouth will give the pupils a good idea of nearly all rivers. Likewise, the study of a prominent mountain, like Mount Shasta, with all its surroundings, prepares for the study of all mountains, and as the connection of this peak with others is shown, the idea of the mountain range is developed. The

study of Lake Michigan embraces all the facts common to the Great Lakes. This is also true in all lines of industry. The study of a single coal mine, wheat field, lumber mill or factory will give the class tangible and definite ideas of the great industry to which each belongs.

(b) METHOD. While fraught with great possibilities, the study of types may result in failure unless the work is carefully planned and executed. The teacher's plan should include the selection of material, her own preparation for the recitation and for securing from the pupils the desired results.

In selecting material, the teacher should be guided by the capacity of the class, the means for preparing the lesson and the interest that the subject will awaken in the pupils. With pupils of the second and third grades, the lessons should deal with those things with which the class is somewhat familiar, and should not be on subjects too difficult for them to understand; neither should they be on subjects whose relations to other subjects are not easily seen. In the rural schools the teacher should choose the leading farm products of the district. In towns, some leading manufacture or other occupation can be chosen. In either case, the teacher should begin by selecting the subject that she can use to best advantage, and in the lower grades the studies should always be confined to those subjects which can be illustrated from material easily obtainable.

The teacher must plan the lesson carefully. She should become thoroughly familiar with the subject, obtaining as far as possible her knowledge at first hand. This may be done by visiting the place and by making inquiries of others. If an industry is to be studied, the teacher should visit the factory, learn all she can by her own observation and supplement this knowledge by conversation with those engaged in the work. Having obtained this knowledge, she should so arrange it that she can give clear, vivid and interesting descriptions of what she has seen, and also show the relation of the subject under consideration to other subjects;

as, in the study of milk, it is not only necessary that the teacher be able to give a full account of how milk is obtained and of its uses on the farm, but she should also be able to explain the relation of the farm dairy to the creamery, and of the creamery to the supplying of the people in the great cities with butter and cheese. Transportation of milk to such cities as Toronto, Vancouver or any large city to which it is shipped should also be noted.

In the preparation of the lesson, the teacher should also decide upon what information she will give the pupils for the purpose of arousing their interest in the subject, and what information she will ask them to obtain for themselves. At the recitation following the laying out of the work, each pupil should report upon his progress. These reports will enable the teacher to direct the activities of the children more definitely, and will show also what information the pupils are unable to obtain and what she should supply at that time. It will probably require several recitations to complete the work, and before the subject is dropped each pupil should be able to give in good language a connected account of what has been studied.

The following type lessons illustrate what may be attempted in primary grades, and also give definite plans for arranging and presenting other type lessons. They should be considered as suggestive, and the teacher should make such modifications as may be necessary to adapt the plan to the needs of her class.

6. The Potato. (a) PURPOSE OF LESSON. To lead children to observe and to appreciate a common farm product.

(b) PREPARATORY WORK. Picture study of *The Angelus*. This picture dignifies labor. Lord Houghton said:

Against the sunset glow they stand,
Two humblest toilers of the land.

.....

O lowly pair! you dream it not,
Yet on your hard, unlovely lot
That evening gleam of light has shot
A glorious passage;

For prophets oft have yearned,
 And kings have yearned in vain to know the things
 Which to your simple spirit brings
 That curfew message.
Enough for us
 The two lone figures bending thus,
 For whom that far off Angelus
 Speaks Hope and Heaven.

About one hundred years ago the potato was introduced into France by Parmentier. The peasants were not pleased with the gift and seemed determined not to cultivate it. Parmentier knew it would prove valuable as food, and succeeded in arousing the curiosity of the people by guarding his potato fields during the daytime, and permitting the watchmen to withdraw at night. The potato plants disappeared very rapidly.

(c) THE POTATO PLANT. Lead the children to the field to discover characteristics of this plant.

(1) Roots: Long, fibrous; strike down deep to find food and moisture.

(2) Stems: Stout, branching, triangular, incompletely winged. Underground branches end in thickened tips—the *tubers*.

(3) Leaves: Alternate, compound, large and small leaflets.

(4) Flowers: Wheel-shaped, in clusters, on curving stems.

(5) Fruit: A round, purplish-green berry, called *potato ball*.

(d) EXPERIMENTS AND OBSERVATIONS. (1) Grate a potato on a piece of cheese cloth; squeeze out the water and measure it.

(2) Slice a potato into a glass of water and discover why the water appears milky.

(3) Cut off a very thin slice and hold it up to the light. Describe its appearance.

(4) Place one end of a slice, cut crosswise, in colored liquid (water colored with red ink), and watch the liquid passing upward through rings of growth.

(5) Cut a slice lengthwise and examine it.

(6) Plant the whole potato, a half, a quarter, a piece with one eye, etc.; decide which is best.

(7) Plant the potato with the stem end upward; plant another with the bud end upward, and note the difference in growth.

(8) Find out the depth at which the roots feed.

(9) Find out which contains more water, young or ripe tubers.

(10) Look for potato balls.

(11) Describe the appearance of the stalks when the potatoes are ripe.

(12) Describe the appearance of potatoes growing in a cellar.

(e) HISTORY. The potato is a native of Chile, South America. It was introduced into Europe by the Spaniards about 1580. In 1886 England celebrated the tercentenary of the potato. Frederick the Great of Prussia sent tubers to all the gardeners in his country and also directions for their cultivation. The potato was introduced into the future United States near the close of the sixteenth century. The potato is related to the deadly nightshade, and was very unpopular for many years.

(f) VALUE OF THE CROP IN CANADA. Yields of 200 bushels to the acre are not uncommon in parts of Canada. The average yield is 150 bushels, while the average for the United States is about 100 bushels. In 1909 the crop was 99,007,200 bushels, the greatest crop on record. The value of the crop is estimated at \$40,000,000. The yearly consumption of potatoes averages 7.85 bushels per inhabitant, but an allowance of nearly one-half should be made for the quantity used for feeding live stock and for manufacturing purposes.

(g) CHIEF POTATO PRODUCERS. These are Quebec, Ontario and New Brunswick. The leading foreign countries in the production of potatoes are the United States, Germany, Russia, Austria-Hungary and France.

(h) USES. (1) Food.

(2) Starch. The manufacture of starch is one of the important industries of Germany, Russia, Holland and

America. The potato contains eighteen to twenty per cent of starch. Dextrine is prepared starch. Violet powder is scented starch. Starch is used in sizing paper, stiffening cotton goods, thickening colors in calico printing, and also in the preparation of lozenges, tablets, adhesive stamps, and for numerous other purposes.

(i) **VARIETIES.** There are many varieties of potatoes; among the best known are the Early Rose, Early Ohio, Triumph, White Star, Dakota Red, Mammoth Pearl and Burbank.

(j) **ITEMS OF INTEREST.** The French and Germans call the potato "earth apple;" the Hungarians, the "earth pear." Germany yields one-fourth of the world's potato crop. New varieties are obtained from seed. The tomato, tobacco and potato belong to the same family of plants. The Colorado beetle, or potato bug, is perhaps its worst enemy.

(k) **QUESTIONS.** Let the children find answers to the following questions: Why is this plant called the "Irish potato?"

How are potatoes cooked?

Why were potato blossoms worn as ornaments in the days of Queen Elizabeth?

Trace a resemblance between the leaves and the blossoms of the tomato and potato.

Caution. This outline is sufficiently complete for classes in the intermediate grades, provided it is all used. With primary classes the most difficult parts should be omitted. These omissions may include the picture study and poem, the more difficult experiments, the uses of the potato which the children could not understand, and the geographical and statistical facts at the end of the lesson.

7. A Brook Basin. Studies of this type introduce the pupils to the basic facts of geography, and the work, even though crudely done, connects the geography studies of the primary with those of the intermediate grades.

(a) **PLAN.** Visit with the class the bank of some slope near the school, showing newly made gullies. If this can-

not be done during school hours, go before or after school or at noon. But be sure that the observations are made before the subject is discussed in the class. Any roadside or street can be used after a rain, but a regular brook basin is better.

(b) *METHOD.* When the place is reached, direct the pupils' attention to the facts you wish them to observe, by such questions as follow: Where are the gullies largest? Where are they smallest? Why are they crooked? What becomes of the material washed away by the rain? If the slope forms a part of a brook basin, continue the work for the purpose of bringing out the following basic geographic facts:

(1) *Direction.* Notice the direction of the slope of the basin as a whole. This determines the direction in which the brook flows. Notice the direction of the slopes on each side of the basin.

(2) *Water Parting.* Lead the class to discover the highest point in the basin, unless this is too far away. With this they will also discover the source of the stream. When these facts are determined, lead the class to discover the ridges, or water partings, which divide this brook basin from those on each side of it.

(3) *General Form.* Compare the width of the valley in the upper part with that in the lower part. Ask the pupils what they think causes this difference.

(4) *Erosion.* Just where is the wearing or erosion greatest? Which bank seems to be wearing away? Which seems to be building? These questions probably cannot be answered at once. Ask the pupils to observe certain points along the banks for a number of days, then to give their opinion.

In connection with erosion explain what is meant by *flood plain*, and when the water is low ask the pupils to find one or more flood plains along the brook.

To enlarge this notion, tell the children stories of great floods on the Mississippi, Nile, etc. Tell them how floods in certain streams have been prevented by planting trees.

(Connect this with forestry, in nature study.) Read aloud to the pupils a part of Tennyson's *The Brook*, and let them copy and learn a short selection from it.

In the lesson following these observations, have the children make blackboard or pencil drawings illustrating what they saw. The very making of the drawings, however poor, will aid greatly in clearing their images. Sand pans, or pans which give the pupils a chance to model rapidly the brook basin, or part of it, are invaluable in such a lesson. The sand, moistened when needed, may be kept in any shallow pan, if regular sand pans are not obtainable, and used often to show geographic forms as no other material can show them.

8. The Wind. (a) **PURPOSES OF THE LESSON.** The aim of the lesson is to impress the facts that (1) air occupies space; (2) wind is air in motion; (3) winds have important work to do.

(b) **PREPARATION OR INTRODUCTION.**

Great, wide, beautiful world,
With the wonderful water around you curled,
And the wonderful grass upon your breast—
World, you are beautifully dressed.

The wonderful air is over me,
And the wonderful wind is shaking the tree;
It walks on the water and whirls the mills,
And talks to itself on the tops of the hills.

(c) **PRESENTATION.** *Experiments.* Push an empty bottle, bottom upward, into water. Why did the bottle not fill with water? Push an empty bottle or drinking glass into water with the open end up. Why did not the bottle fill more quickly? The water could not enter the bottle until it pushed the air out. Air occupies space.

Direct attention to hot air above the stove, register, etc. When air is warmed, it is expanded, made lighter, and is pushed up by the current of heavy, cool air. Air in motion is called *wind*.

High and low
The spring winds blow!
They take the kites that the boys have made,
And carry them off high into the air;
They snatch the little girls' hats away,
And toss and tangle their flowing hair.

(d) SUGGESTIVE QUESTIONS. From which direction is the wind blowing today? In what way does spring differ from winter? What work has the wind to do in the spring? (Melt the ice and snow; bring rain clouds; awaken life in seeds, roots, buds, etc.; drive clouds away.) What work has the wind to do in autumn? (Shake down nuts; scatter seeds, etc.) Name other uses of the wind. (Drive sailing vessels; turn windmills; carry water over the land.) Which wind brings rain? Which wind brings cold? Which wind brings heat? Which wind brings flowers?

(e) THE FOUR WINDS. Have the children learn this poem. It can be recited in concert:

"Which is the wind that brings the cold?"
"The North wind, Freddy, and all the snow;
And the sheep will scamper into the fold,
When the North begins to blow."

"Which is the wind that brings the heat?"
"The South wind, Katy; and corn will grow,
And peaches redden for you to eat,
When the South begins to blow."

"Which is the wind that brings the rain?"
"The East wind, Arty; and farmers know
That cows come shivering up the lane,
When the East begins to blow."

"Which is the wind that brings the flowers?"
"The West wind, Bessie; and soft and low
The birdies sing in the summer hours,
When the West begins to blow."

EDMUND CLARENCE STEDMAN.

(f) SELECTIONS FOR MEMORIZING.

Sing a song of Seasons!
Something bright in all!
Flowers in the summer,
Fires in the fall.

ROBERT LOUIS STEVENSON.

O, March that blusters and March that blows,
What color under your footsteps glows!
Beauty you summon from winter snows,
And you are the pathway that leads to the rose.

CELIA THAXTER.

Song: SWEET AND LOW

Sweet and low, sweet and low,
Wind of the western sea,
Low, low, breathe and blow,
Wind of the western sea!
Over the rolling waters go,
Come from the dying moon, and blow,
Blow him again to me;
While my little one, while my pretty one, sleeps.

Sleep and rest, sleep and rest,
Father will come to thee soon;
Rest, rest, on mother's breast,
Father will come to thee soon;
Father will come to his babe in the nest,
Silver sails all out of the west
Under the silver moon:
Sleep, my little one, sleep, my pretty one, sleep.

TENNYSON.

THE WIND

I saw you toss the kites on high
And blow the birds about the sky;
And all around I heard you pass,
Like ladies' skirts across the grass—
O wind, a-blowing all day long,
O wind, that sings so loud a song!

I saw the different things you did,
 But always you yourself you hid.
 I felt you push, I heard you call,
 I could not see yourself at all—
 O wind, a-blowing all day long,
 O wind, that sings so loud a song!

O you that are so strong and cold,
 O blower, are you young or old?
 Are you a beast of field and tree,
 Or just a stronger child than me?
 O wind, a-blowing all day long,
 O wind, that sings so loud a song!

ROBERT LOUIS STEVENSON.

(g) STORIES. *Orpheus*, a myth of the South Wind; *The Wind and the Sun*; *The Bay of Winds*.

Whichever way the wind doth blow,
 Some heart is glad to have it so.
 Then blow it east, or blow it west,
 The wind that blows, that wind is best.

(h) HAND WORK. Cut, draw and paint windmills, kites, etc.

9. Ostrich Farming.

The fleet-footed ostrich, over the waste,
 Speeds like a horseman who travels in haste
 Hieing away to the home of her rest
 Where she and her mate have scooped out their nest.

(a) THE OSTRICH. (1) *Description*. The ostrich is the largest and most valuable of all birds. This awkward, ungainly bird has an oval-shaped body, bare legs, rudimentary wings, long, bare neck, small, flat head, large eyes, and short, wide bill. A full grown bird will weigh from 350 to 450 pounds, stand eight feet high, and can reach up easily to the height of ten or twelve feet to get oranges or other fruits. Its strides, when running, are about 22 feet, and it can outrun the swiftest horse. Its voice is deep, hollow, and not easily distinguished from that of the lion. It makes



MADE IN GERMANY

Painted for Public School Methods by the Art Institute, Chicago

THE OSTRICH

Pictures 2, 3, 5, 7, by courtesy of Cawston Ostrich Farm.

- 1 Male bird.
- 2 Flock showing relative height of man and bird.
- 3 Ostrich chick, three days old.
- 4 Feathers dyed for market.
- 5 Part of flock.
- 6 Eggs in nest on sand.
- 7 Driving tandem.

a cackling sound, and when in the act of striking it hisses loudly. It has enormous muscles and can kick as hard as a horse. It kicks forward and downward, and has been known to kill large beasts with a single stroke. The ostrich lives from sixty to seventy years, and some birds have reached the age of one hundred years.

(2) *The Food.* The food consists principally of alfalfa, grain and vegetables. Ostriches are fond of oranges, apples, sand and gravel. The chicks are very delicate and eat nothing for the first four days. They are then fed chopped alfalfa, mixed with ground egg shells, and later soaked bran, corn, gravel, etc.

(3) *Nest and Eggs.* The nest is made by the male bird scooping out a shallow spot in the sand. The hen lays at the rate of one egg every other day until fifteen or eighteen have been deposited. The birds take turns in sitting upon the eggs, the male bird at night and the female during the daytime. The sitting lasts for six weeks. An ostrich egg is about thirty times as large as a hen's egg, and weighs three or more pounds. The eggs are not only used for food but the shells are made into spoons, ladles and various other articles.

(b) *OSTRICH TAMING.* Ostrich taming began about fifty years ago. A man in South Africa captured some wild chicks and after feeding and watching them for a time, he decided that ostriches could be reared and their feathers plucked and sold at a great profit.

(c) *OSTRICH FARMS.* Large ostrich farms are at present established in different countries, as South Africa, Egypt, and the United States. In Cape Colony there are more than a quarter of a million ostriches cared for, and several million dollars' worth of feathers are yearly shipped from the Cape of Good Hope to London. This industry was established in the United States about twenty-five years ago. Great progress has been made during the past five years, and today thousands of ostriches are reared on farms in Florida, Arkansas, Colorado, Arizona and California.

(d) **THE CAWSTON FARM.** This farm is situated in South Pasadena, and is considered one of the most beautiful spots in southern California. It is surrounded with live oaks, orange trees, palms, roses, and all forms of tropical verdure. Here the visitor may see the ostrich feather industry from the beginning to the end—ostriches of all ages, ranging from one to eight feet in height; ostrich incubators where the young chicks are hatched; the factory where skilled workers manufacture beautiful feather goods, such as fans, boas, stoles, hat plumes, and all sorts of novelties made from feathers.

(e) **PLUCKING.** The first plucking takes place when the bird is about nine months old, and afterwards about three times every two years during the bird's life. The bird to be clipped is driven into a triangular enclosure, and a hood is drawn over its head. Then the two pluckers raise the wings and clip off the wing plumes first, twenty-five from each wing; those of the male are white and black, and those of the female white, tipped with gray or yellow. About three hundred feathers are taken from each bird. Plucking does not injure the bird nor cause pain. Ladies can wear ostrich plumes without feeling that in so doing they cause injury or pain to the birds.

(f) **ITEMS OF INTEREST.** (1) The chief ostrich-feather country of the world today is South Africa. Several hundred thousand pounds of feathers are now annually sent from Cape Colony to London, and many are shipped to our markets from Arizona and California.

(2) In London there are feather auctions every two or three months.

(3) Almost all the wild ostriches have been destroyed, and their feathers have at present but a small part in the world's commerce.

(4) The famous ostrich plumes, which grow anew in a few months after cutting, sell from a dollar or two to two hundred dollars apiece, according to size and quality.

(5) Three white ostrich plumes form the badge of the Prince of Wales.

(6) The natives of Africa are fond of ostrich eggs, and draw them out of the nest with a long stick so that the bird may not smell the intruder.

(7) Ostriches are vegetarians; a small herd will destroy a good-sized cornfield in a single night.

(8) Africa is this bird's favorite home. On a good farm one hundred dollars' worth of feathers is obtained from a bird in a year.

(9) In the Zoological Gardens near Paris are some fine ostriches which are often harnessed to children's carriages.

(10) The South American ostrich is about half as large as the African. It has three toes and no tail feathers. The African ostrich has two toes and the feathers are far more valuable than those of the South American bird.

(11) The ostriches in the United States were brought from Africa.

10. Reviews. Type studies are excellent for reviews, especially when the subject has been pursued in a somewhat disconnected manner, as frequently happens in following the plan of the text-book in primary geography. By preparing outlines for the pupils to use in studying their review lessons, all related topics can thus be connected. In the review of the St. Lawrence Basin, one outline would take up the study of the main river from source to mouth; another would treat of the tributaries; a third, the nature of the country; a fourth, the industries in the basin; a fifth, the cities, and so on until each topic covered in the study had been treated. Finally, the relation of all these topics to one another should be shown.

Caution. In order to obtain the most far-reaching results from the study of types, the general plan should be carefully formed and should include such a period of time as a term or a school year. The subjects selected should be of such a nature as to enable the class to obtain a connected idea of the leading facts of geography of their own

county or city, according to the plan that the teacher has in mind. For the higher grades the plan will, of course, be much more extended than for the primary grades.

Studies of this nature should also be followed in the higher grades by the thorough and systematic study of a textbook.

11. Work for the First and Second Grades. (a) **PLANTS AND ANIMALS.** The geography work of the first and second grades is along the line of nature study. In giving her lessons on plants and animals, the teacher should constantly bear in mind the relation that these lessons sustain to the geography of the higher grades. The geography phrases of such lessons consist in having the pupils ascertain where the plants grow. Are they found on high or low land? In dry soil or wet soil? What are they used for by man? How do animals use them? The answers to such questions as these bring out the facts that birds use portions of some plants in building their nests, that they use the seeds of plants for food, that squirrels eat nuts and acorns, and that rabbits feed upon clover, the young shoots of shrubs and the bark of young trees. The children will discover that some plants will grow only in low, wet ground, while others require high land and a dry soil. They will also learn that some animals burrow in the ground; some make nests in the trunks of trees, while birds build their nests in various places.

In treating of the uses of plants and animals to man, only those uses should be mentioned that the children already know and can easily understand, such as the use of corn and wheat for food and the use of cotton fiber for clothing. The work should be made very simple and confined to the immediate locality. For more specific plans, see directions for nature study in the two lessons devoted to that subject.

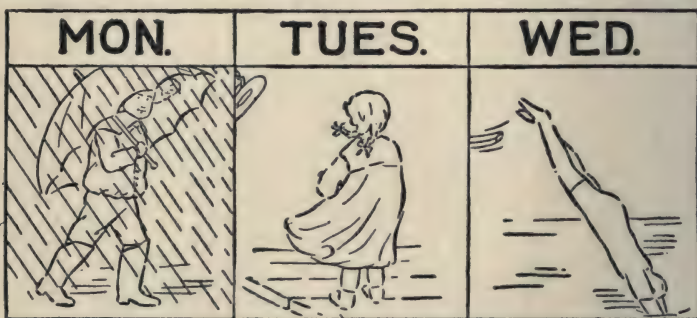
(b) **STUDY OF THE WEATHER.** Even the youngest children can be easily interested in the weather. They all love the sunshine, and many of them enjoy the rain and the



DESIGN FOR BLACKBOARD CALENDAR

snow. One of the most interesting and effective methods is to construct a weather calendar somewhat after the plan shown on this page. The calendar may be drawn upon the board, or upon a large sheet of manila paper, if board room

is scarce, and the weather by which each month is characterized indicated by drawing a picture at the top. A more elaborate calendar can be made for the week by drawing a picture in the square for each day. The illustration below gives an idea for a rainy Monday, a windy Tuesday and



a hot Wednesday in summer. Again, the pictures may be colored or the squares washed in with color—yellow or blue for sunshine, gray for clouds, and black for rains or other storms. If the calendar is large and the teacher or some pupil in the school can do the work much interest is added by sketching into each square some event of the day.

In the second grade, and especially in the last half of the year, the attention of the children should be called to the sky, leading them to notice the different forms of clouds and the rising and setting of the sun, though only the simplest facts connected with these phenomena should be dwelt upon.

Plant charts are also interesting. A plant chart for May would include the plants found blossoming in May; it might give merely the names, or the names, pictures and dates when the flowers were first seen. A plant chart might include also the seed and root of each kind of plant. For the first and second grades the chart should be simple, like the illustration on page 24.

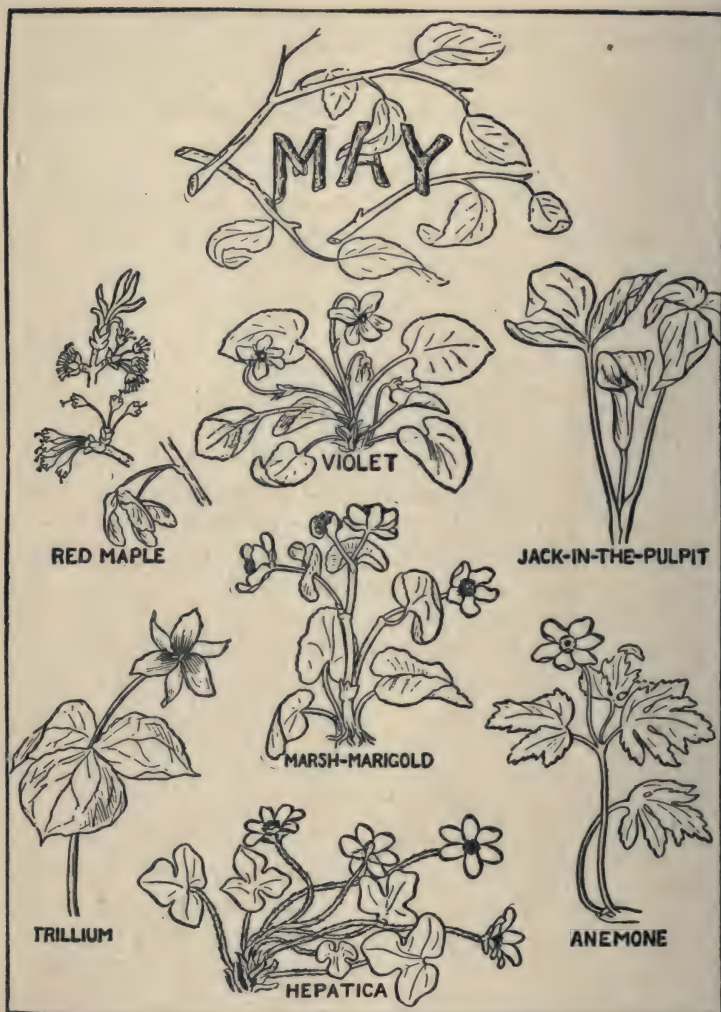
(c) THE STUDY OF MATERIAL. The pupils in these grades should be made acquainted with the various materials in common use, such as wool, cotton, iron, brick, stone, lumber

and asphalt. To these, if time permits, many of the commodities used in the home may be added, such as tea, coffee, sugar and spices. This is excellent work for the winter months, and can take the place of the lessons in nature study that occupy the fall and spring. The work should be made very simple, and the children asked to make collections of material. They should learn to recognize the different materials from their appearance; be able to distinguish cotton from wool, iron from lead and other metals from one another.

It is not wise at this time to ask the children to distinguish different kinds of wood, as this requires too minute a study. The children will be interested in learning what parts of the plant or animal or other material are used, as the fiber of the cotton plant, the trunk of the tree for lumber, and also what substances are used in manufacturing such building material as brick and cement. The teacher should be guided in these lessons by the ability of the class to comprehend the work and by the time at her disposal. The danger is that too much will be attempted.

12. Work for the Third Grade. (a) NATURE STUDY. In the beginning of the year the geography of the third grade is a continuation of and an enlargement upon the nature study of the second grade. The difference, however, lies in the fact that the geography becomes more prominent and the nature study less so.

The pupils should now begin a systematic study of home geography. A number of topics can be considered during the year. The extent to which each can be carried will depend upon the ability of the class and upon the time at the teacher's disposal. Usually, more can be accomplished in a graded school than in a rural school where the teacher is compelled to have a large number of recitations each day. In connection with the study of plants each year, the children should have their attention called to soil, the rocks, and the relation of one to the other. A little attention to this matter on the part of the teacher will soon enable the



SPRING FLOWERS

pupils to understand how soil is formed, and the brightest ones will often be able to tell why the soils in the valley and on an adjoining hillside are frequently different

(b) **MAPS.** In this grade the children should begin the study of maps. This is best introduced by having the class draw a map of the schoolroom. The first map should be drawn by the teacher and class together. Before the lesson is completed, the children should understand what is meant by scale; also what part of the map is always used for a given direction, as the top for the north, the right hand for the east. After the map has been drawn by the pupils and teacher together, it should then be drawn by the class without the aid of the teacher. In due course of time a map of the schoolroom should be followed by one of the school grounds. Later in the year this exercise can usually be extended with profit to the sketching of a map of the neighborhood.

If the school is situated in the midst of a large town, only a small section of the town, including the block in which the school is located, and possibly an adjoining block, should be included in the map. Teachers frequently make mistakes in requiring pupils of this grade to construct a map of a city or town, the work required being altogether too complicated. In rural schools, the older pupils of this grade ought to be able in the latter part of the year to construct maps of the farms on which they live. An exercise of this kind always lends interest because of its variety.

(c) **CLIMATE.** The weather study of the primary grades should be extended in the third grade to include observations on the climate. These lessons should include a study of the seasons and their length and characteristics, also the months in which each season occurs. Each season should be characterized by the kind of weather which predominates. Summer is hot and winter is cold; autumn is warm and grows cold, while the spring is cool and grows warmer until it merges into summer.

The length of day and night at different seasons of the year should also be noticed. Pupils of this grade should be led to watch the position of the sun on the horizon at

sunset. While they will be unable to see any change in its position from one day to another, by comparing it with some fixed object which is between them and the horizon, such as a tree or a building, in the course of a month they will discover that the sun has changed its position quite a little, and in the course of a season they will be able to note the change which relates to the difference in the length of day and night. The pupils should be led to study the moon and learn its different phases. Children of this grade can also be taught to locate the north star by its position in relation to the Great Dipper. These lessons lead them to an interest in the heavenly bodies which, as the years go on, will increase and enable them to derive much pleasure from the study of the sky.

In connection with the study of the seasons and the formation of soils, the work of water should be considered; how the rains wash the soil down into the valleys, wearing little valleys in the banks by the roadsides and in other places; how the evaporation of water forms steam or invisible vapor, according to the condition of the atmosphere, and how the rapid freezing and thawing of water crumbles the rocks and assists in the formation of soil. The formation of frost and dew and snow should also be treated. If only the simplest and most obvious facts are touched upon in these lessons, they can be made very interesting and will give the pupils much valuable information.

(d) SURFACE. The children already know what hills and valleys are, and if they live in a mountainous locality they know the difference between a hill and a mountain; but probably they have never had their attention called to the relation which these different surface forms sustain to one another. They should now begin a systematic study of surface. In this way only the leading features of the locality should be considered, as the highest hills, the deepest valleys, the largest streams. Later, the study can be extended to the more minute features. These lessons furnish excellent material for developing the descriptive powers of the chil-

dren and are valuable aids in language work as well as in geography.

(e) DRAINAGE. In connection with surface, the attention of the children should be directed to important streams. They should be led to discover for themselves, if possible, why the streams flow in a given direction. It is not wise to follow this topic too far. For illustration, if the principal river nearest to the school is long, like the Ottawa or the Mississippi, it is not wise to make a complete study of this river at this time, following it to its mouth and treating of its tributaries. Instead, make a study of one tributary as a type.

(f) PRODUCTS. These should include the principal products of the locality. They are usually divided into agricultural, mineral and manufactured. In Quebec this line of study will generally lead to a study of hay and dairy products. In Ontario it will lead to the study of grain, fruit, and in some localities, numerous manufactures. In the selection of types, the teacher will be guided almost entirely by the locality.

(g) OCCUPATIONS. What has been said in respect to the selection of topics in products applies here. In connection with these topics the pupils should be led to see the necessity for different occupations; as, why one man is a farmer, another a blacksmith, another a merchant, and to realize the dependence that the various occupations of the community have upon one another.

(h) MEANS OF TRAVEL. This includes a study of roads and railroads in the immediate locality, and, if upon a navigable river or other body of water, the boat lines. This should not be carried too far. In the study of railroads in this grade it is usually safe to stop with the nearest important railroad center located upon the line. In the study of roads it is usually safe to stop with the largest town to which the road leads.

(i) PUBLIC BUILDINGS. These include the school, churches, courthouse and any other large buildings within

the locality studied. The reason for the existence of these buildings and their location can be profitably discussed. It is not well at this time to enter into their means of support.

(j) **COURSE OF STUDY.** Wherever the teacher finds an established course of study it should, as far as possible, be followed. If carefully prepared, such a course will cover the ground outlined above, and it will also prepare the pupils for the text-book to be used in the next grade.

(k) **PREPARATION FOR THE TEXT-BOOK.** In most schools the primary geography is introduced in the fourth grade. The teacher of the third grade should become thoroughly acquainted with this book, and so plan her work that at the end of the year the pupils will be prepared to study the text-book intelligently.

13. Suggestive Lessons for Primary Pupils. (a) **SNOW.** Description; whence the snow comes; cause of snow; study of snow crystals; uses of snow.

A good time for this lesson is during the first snowstorm. As a preparation for the simple explanation of the cause of snow, the evaporation of water and its presence in the air may be shown by leaving a small dish of water in the room until the water evaporates.

(b) **THE SUN.** Have a simple description given by the class; call attention to the rising and setting, and the change in place of rising and setting as observed by the pupils. Give a simple explanation of the change of the sun's position. Have the pupils measure the sun's shadow each day at noon and draw conclusions. Discuss the value of the sun.

(c) **OCCUPATIONS.** Enumerate and describe various occupations according to the season; as, harvesting crops in autumn, cutting ice in winter and planting corn in spring.

14. Suggestive Lessons for Third Grade. (a) **MARKET GARDENING.** 1. *Preparation.* Name the kinds of vegetables found in the markets and the places from which these vegetables come.

2. *Visit to a Market Garden.* Make a study of hotbeds; purpose, construction, location and use. Describe trans-

planting; also the care of fields. Explain the method of getting produce to the city.

In the discussion following this excursion, the teacher may show pictures of other market gardens, city streets where this produce is sold, wagon loads of vegetables being taken to the city and market gardens and workers in foreign countries where market gardening is carried on extensively.

(b) VISIT TO A CREAMERY. Make observations upon and have the recitation include such topics as taking the milk to the creamery; weighing the milk; separating the cream from the milk; skimmed milk; churning; buttermilk; working the butter; salting and packing butter; the quantity of butter obtained from a certain quantity of milk; care of the creamery; milk inspection by officials. Compare this method of making butter with butter-making in private homes. Obtain pictures of various churns and separators, men weighing the milk, etc.

(c) FARMING. Have the pupils understand what a farm is. Observe various sizes of farms; kinds of soil; crops raised; care of fields. Study the work done in each season of the year; identify machinery, tools, buildings. What becomes of the produce? Discuss the importance of farming, and compare it with other occupations.

A visit to a near-by farm should be made, if possible.

(d) FOODS. Meats, vegetables, fruits, nuts, etc.

Each of these topics should be taken up separately, somewhat in the following manner:

Fruits. Enumerate the various kinds familiar to the pupils; notice the place from which each comes and how it is brought to market; how it is produced; the industries involved in its production, and its value.

Every kind of fruit cannot be studied in detail, but one or two kinds should be studied as types, while the rest can be briefly mentioned. The study of foodstuffs may be made intensely interesting by means of pictures, vivid descriptions and stories.

HISTORY

15. Relation of Geography to History. Geography and history are so interwoven that it is not possible to teach one to any extent without introducing the other. This is illustrated by the study of means of travel suggested under Section 12 (h). However, the history work of the third grade should be limited to such incidents and biographies as the work in reading and geography touch upon, with the addition of simple biographies of Bible characters, Greek heroes and British and Canadian patriots, adventurers and discoverers. The stories of brave deeds on land and sea, and of poor boys who overcame great difficulties to get an education and succeeded in winning high honors, may do more to kindle high ambitions and disclose vital ideals than any other work done in school. They make the best basis for future interest in history.

The reading lessons will doubtless lead to the discussion of Indian life, and possibly the life of other primitive peoples. If so, such lessons should be given on these topics as will give the children a good idea of the people under discussion. The illustrative lessons given below show how these and similar topics may be treated.

16. Modes of Travel. (a) **PURPOSE OF LESSON.** The aim of the lesson is to have the child see how our present means of traveling have developed from those most primitive; how our convenient transportation is the outgrowth of the observations and inventions of the savage, barbarian and other peoples, ages before us.

(b) **METHOD.** Let the child tell what he would do along the line of travel, under certain conditions. Show how necessity caused each improvement. As the story is told, write it on the blackboard and illustrate primitive means. Make yourself draw at the board. Have the children draw each story on the blackboard; also write on paper the stories of the different inventions. Write unfamiliar words on the board. Pictures of some of these modes of traveling may be found in common geographies, Webster's Dictionary, etc.

(c) **OBJECTS FOR STUDY.** (1) Steam engine of today—story of Robert Fulton; (2) steamboat; (3) bicycles; (4) horseless carriages or automobiles. Make a word picture of the future, with the mention of possible inventions.

(d) **HISTORY.** Man first traveled on foot; he saw wood float on water; he wished to fish or cross streams and used (1) a log; (2) a raft of logs; (3) a raft with sides of logs; (4) the hollow trunk of a tree; (5) wood burned hollow for canoes, as he had done for cooking utensils; he learned that light boats were better than heavy ones and (6) used bark; then (7) bark and skins, making what we know as the canoe. He wished to go down the river and take his family a long distance, and so made a raft or boat with a straw top for shelter, shaping it like a roof, with screens of straw. He became tired after much rowing, and he also wished to go faster. Then he saw the effect of wind on the boat, on himself and on broad, flat surfaces, and invented the sailboat. After many improvements on the sailboat and hundreds of years of its use, the use of steam was discovered; then followed countless inventions and improvements on the steamboat.

On the desert the camel was used. The camel could do without water for a long time; the sand and heat would not unfit him for work, and it was good for traveling and carrying burdens.

In the mountainous countries the donkey was used, as he was sure-footed, slow and easily fed.

In the cold countries man used snowshoes, sledges and dogs, for these would help him to slide easily over the snow.

In southern countries the palanquin and sedan-chair were used, as well as slaves and jinrikishas, as aids in traveling.

In many countries the wheelbarrow was used for transportation.

First there were wheels without spokes, made of solid wood, soon followed by inventions of spokes and tires; then came ox-carts, coaches and carriages. Ox-carts with rude, spokeless wheels are still used in some countries.

There was a great length of time between the invention of coaches, street cars and steam cars; then came improvements on steam engines, and finally the use of electricity was discovered. Make clear the advantages of our present means of transportation.

17. Indian Life: The Story of Hiawatha. (a) INTRODUCTION. Hiawatha, a little Indian boy, lived with his grandmother, Nokomis, in a wigwam by the shining Big Sea Water. In front of the wigwam were the waters Gitche Gumeé, and behind rose the dark and gloomy forest of pine and fir trees.

Nokomis was old, and she took care of little Hiawatha. His cradle was made from a linden tree. It was bedded with soft moss and rushes and was very soft and comfortable. Sometimes while Hiawatha was in his cradle in the wigwam he was very fretful, and Nokomis would say to him, "Hush, the Bear will hear thee." She then called him a little owlet and stilled his wail by singing "Ewa-yea! my little owlet." (See *Indian Lullaby*, Volume One, page 232.)

Nokomis taught Hiawatha about the stars and northern lights, the water, the forest, the birds and other animals. As Hiawatha and his grandmother sat at the door of their wigwam in the evening, they often thought of the shining lights in the heavens and of the sounds of the trees, which seemed to say, "Minnewawa!"

One day as Hiawatha stood at the door of the wigwam, he noticed many beautiful colors in the sky, and Nokomis then told him the story of the rainbow. The flowers of the forest and shore are very beautiful, because they are of many colors. While they fade on earth, they do not perish. They blossom in the rainbow, which is the heaven of the flowers.

Hiawatha loved the birds, and he soon learned their language. He called them his little chickens. He soon learned the language of the beavers and how they built their lodges; where the squirrels hid the acorns; how the reindeer ran so swiftly, and why the rabbit was so timid.

Iagoo, who had been a great traveler, often visited Hiawatha. He taught him many things, among them how to



WHAT HIAWATHA SAW IN HIS CHILDHOOD

use the bow and arrow. Hiawatha went hunting one day and killed a deer. Later they had a feast, and a coat was made for Hiawatha of the skin.

(b) THE INDIAN'S DRESS. The way the Indians dress depends on where they live, and also upon the civilization. Near the Colorado River in Arizona, the woman in some of the tribes made skirts of the inner bark of the cottonwood trees, and the lower ends of the strips of bark, reaching below the knees, were often split to resemble fringe.

One of the first changes in the costumes of Indians made after coming in contact with civilization was the lengthening of the women's skirts. A great many of the Indians still wrap their highly colored blankets around them. Some of these blankets are called Navajo blankets. We use them on our cots.

Their shoes are called moccasins, and some of them are made from the fibers of the Yucca, while others are of skin covered with beads. Some wear sandals, which are fastened to their feet by thongs. The Mexican Indians wear cotton and other fibers. Mantles and other forms of apparel also appear to have been in use, while feather robes were not uncommon. These, however, were ceremonial, and indicative of rank.

The Indians are very fond of jewelry, such as necklaces, beads, earrings, etc. Painting is common to all Indians. As a general rule, they applied red coloring matter to the line exposed by parting the hair, and the women and girls frequently colored their cheeks red to enhance their beauty.

(c) THE HOUSES. Most of the Indians lived in tents, which they called *wigwams*. The outside was usually decorated with paintings. As the Indians of North America were and are living in several different stages of culture, their architecture would naturally present a wide range of house structure. Indian house structure may be divided according to the material of which the houses are made, into four groups; first, temporary or bark shelters, and skin tents; second, wooden structures; third, earth huts with a frame-

work of timber, and snow huts; fourth, the permanent stone structures.

They really have no furniture, as they always sit on the ground. Their beds are on the ground. The cooking is done out of doors over a fire. Three sticks are put in the ground a certain distance apart, forming a triangular space at the bottom. These come together at the top and are fastened securely. The kettle is hung from this, and a fire is built under it. The Indians have an easy life, working very little.

(d) THE INDIAN BABY. The Indian baby, called a *pappoose*, is very interesting. It is put in a cradle most beautifully made by its mother. It takes a great deal of time and work to weave the grasses and other materials, to put on the beads and make it look pretty for the pappoose. The Indian baby is laid upon a board and fastened to it on his back. This board is hung in a tree and the baby is very happy. The Indian mother is as fond of her baby as the white mother is of hers. The board that the baby is fastened to is covered with soft skins.

In our nursery rhymes we read of a certain "Baby Bunting, whose father went a-hunting, to fetch a rabbit skin to wrap the Baby Bunting in." This is what the Indian does. He finds deer skins or matting, or soft bark from trees when he cannot get skins, and the mother stuffs the little cradle with soft grass or moss. The Indian baby is very comfortable, and he will cry to go back to his cradle.

(e) WORK. The Indian women work and the men fish, fight, hunt, etc. The boy is spoiled, doing just as he pleases. He has no toys except a ball and a kite. His instincts are destructive, killing birds or snaring them, and robbing their nests; yet with all this want of education, the boy finds much of his experience very useful.

The Indian girl helps her mother in many ways. She embroiders, sews skins of animals, and decorates many articles with beads. The girl's play house with their dolls. They imitate the ways of their elders.

The Indians are a very interesting class of people to study. Years ago they were at war most of the time. Now they are more peaceful and imitate civilized people.

(f) **MODES OF TRANSPORTATION.** In the absence of wheeled vehicles, transportation by land during the summer months was on the backs of men and women. The dog lent a meager aid as a pack animal, carrying about one-hundred pounds. In winter sledges drawn by dogs and men were the primitive bearers of burden. The first passenger train of the continent was a procession of Indian women with their children strapped on their backs on cradle boards. The canoe of birch bark was also used.

(g) **INDIAN AMUSEMENTS.** The Indian home life is a constant round of dancing, feasting and playing games. Some of the dances, formerly common, had no special significance; some were religious, others of a pantomimic or dramatic character. Throwing or shooting at a target with tomahawk, knife, bow and arrow, and later with guns or pistols, was much practised. There were numerous games played with bones. Among the boys, shooting with the bow and arrow, walking upon stilts, throwing stones from slings, were common amusements.

18. Books for Teachers. Besides periodicals, three classes of books are valuable to the teacher of geography—books of travel, books suitable for the pupils to read and books on methods of teaching the subject. Those of the first and second classes are so numerous that no list of them is attempted, but a few of those most helpful to the teacher are here given:

Seven Little Sisters; Ten Boys on the Road from Long Ago to Now. Jane Andrews. Ginn & Co., Chicago.

Home Geography. H. W. Fairbanks. Educational Publishing Co., Chicago.

Child and Nature. Alexander Frye. Ginn & Co., Chicago.

The Science Primer; The Teaching of Geography. Archibald Geikie. American Book Co., Chicago.

Methods and Aids in Teaching Geography. Charles F. King. Lothrop, Lee & Shepard, Boston.

The Jungle Book. Rudyard Kipling. The Century Company, New York.

Aunt Martha's Corner Cupboard. Mary and Elizabeth Kirby. A. Flanagan Co., Chicago.

The New Basis of Geography. Jacques W. Redway. The Macmillan Co., Chicago.

Great American Industries. W. F. Rocheleau. A. Flanagan Co., Chicago; Vol. I: Minerals; Vol. II: Products of the Soil; Vol. III: Manufactures.

Geography of Commerce and Industry. W. F. Rocheleau. Educational Publishing Co.

Little Children of the Cold. Frederick Schwatka. Cassell & Co., New York.

TEST QUESTIONS

1. What attention should be given to geography in the first and second grades? Give reasons for your answer.
2. What preparation should the teacher make for teaching geography in the primary grades?
3. Show by illustration how ability to draw aids the teacher in primary geography. Explain how it aids the pupils.
4. Why does the teacher of geography in the primary grades need to read current periodicals?
5. Give an outline of a lesson for a class in the second grade, based on an excursion to a brook or creek.
6. Why is the study of types especially suited to the work in geography? What dangers must the teacher avoid in pursuing this line of work?
7. Give your opinion of the value of the study of maps in the third grade. What do you expect the pupils to gain from this study?
8. Give an outline for a lesson in the third grade, based upon the study of Lake Superior as a type.
9. What relation does the geography work in the third grade bear to the language work in this grade?
10. Why does the study of biographies, history stories and the study of primitive life in third grade aid the work in geography in this grade? Give an illustration.

CHAPTER TWO

CONSTRUCTION WORK

INTRODUCTION

1. Educational Value. The educational value of constructive work lies in the doing, not in the results obtained; in the working together of hand and brain, and in the power and consciousness of power thereby gained. If the method of approach is reasonable and the requirements are suited to the abilities of the child, the results will take care of themselves.

2. Adaptability of the Course. A course in construction may be outlined for one system of schools that would be poorly adapted to another system, owing to variation in environment, interests, materials available, and time allotted. Hence, this lesson contains a series of suggestive exercises possible for use in many localities, but suggested in such a way as to be adaptable to any conditions. This accounts for a choice being allowed in some instances, and for the use of inexpensive material that is easily obtained.

3. Materials. The materials needed for these exercises are sharp-pointed scissors, white dodger, that is, unprinted newspaper, tag board, cardboard, construction paper such as may be procured from school supply houses, white drawing paper, heavy manila paper, tissue paper, raffia, checked gingham, carpet warp or other soft, strong twine, water color paints or colored crayons, and paste. Substitutes for many of these would be possible, when necessary.

For book covers, bogus paper is useful, but plain-toned wall papers are suitable, coming as they do in soft browns, green and grays. A fifteen-cent roll will carry out several exercises for a school of forty pupils. Stained manila papers may be employed, also, using as stains strong coffee, the juices from boiled beets, red cabbage, carrots, greens, barks, nut husks and other vegetable products. Experiments will produce many desirable tones.

4. Relative Value of Results. In hand work the aim is not to produce a series of models for the sake of the models themselves, but rather to develop the power to do and to progress through adequate effort. The pupil's gain is judged by his effort and progress, rather than by what he constructs. Effort and progress will be tested by the product from the conceptual and technical standpoints. In lower grades the method of work is much less important, but later it is demanded by the child himself, as he begins to realize his limitations. Give the child what he can do reasonably well, but permit progress by increasing the difficulty of the exercises according to his ability.

5. The Teacher's Preparation. This work is of such nature that it can be done by any teacher in any school, provided the teacher is interested in construction work, and is willing to take the necessary time to prepare the exercises.

The first step in this preparation consists in doing the work which you are to ask the pupils to do. Unless you have had extended experience in work of this nature, so that you can make the various articles before the class with ease and skill, this preliminary practice is absolutely necessary to your success. Nothing will so quickly discourage the children as to find the teacher unable to give easily and skilfully the assistance they require. While the pupils should be led to do the work themselves, and as far as possible to discover the best way of doing it, they arrive at stages in their progress where demonstration by the teacher is necessary to success.

In your study of this lesson you should also do the work called for under each exercise.

The second step in this preparation will be the collection and arranging of material. This should be provided and prepared for use before the first lesson is attempted. If you wish to have the children interested and enthusiastic, see that they begin the work under favorable conditions. The expense for the material described is merely nominal, and, with rare exceptions, the school authorities will allow

you to purchase what is needed. Scissors, coloring material and some of the paper called for are also used in the drawing lessons, so that one outfit answers largely for both purposes.

When the material is procured, plan for its care and distribution so that nothing will be wasted. If the school-room does not contain a closed case in which the material can be kept, so it will be free from dust, a board box can be secured and fitted with a cover. When covered with cloth or wall paper, the box will present a pleasing appearance, and it can be kept in a convenient place in the schoolroom.

FIRST YEAR

6. Paper Cutting. (a) **MATERIAL.** The white dodger used for this work is conveniently cut 9x12 inches. This paper is desirable because it is easily cut, not easily torn, and is inexpensive. Sharp-pointed scissors of medium size are preferable, as the blunt-pointed scissors are too clumsy for use above the kindergarten.

(b) **METHOD.** A few general rules may be formulated, which, if followed, will give the child the desired training.

1. Be sure that the child has an idea and a mental image before he begins to cut. Secure the image from objects, when possible; otherwise, from pictures, but these need not be present when the cutting is done, provided they have been previously studied.

2. Be definite as to the size of the objects and the method of cutting, using generally halves or quarters of the 9x12 sheets.

Caution. Do not allow the pupils to draw first, then cut on the line, for the exercise, beyond the drawing, is then purely mechanical. A large part of the value of paper cutting comes through the child's holding his mental image as a whole long enough to reproduce it.

(c) **WORK TO BE ACCOMPLISHED.** Preliminary exercises, fruits, vegetables, ducks, hens, turkeys, plates, knives, forks, spoons and serving dishes for setting a dinner table, and any simple objects in which children may have become

interested, in connection with other subjects, should constitute the work for the fall months.

7. Preliminary Exercises. (a) **DEFINITIONS.** When the children just enter school, they are not accustomed to directed effort. They must learn to follow directions, and it will assist both the teacher and pupils if the latter are taught a few essential terms, such as edge, front, back, center, right, left, corner, front corners, back corners, fold, crease, from left to right, from back to front, and from corner to corner. These may be taught in connection with paper folding, and preliminary training in the use of the scissors may be included. It will require several lessons and much drill to secure familiarity with these terms, which must be mastered before much work in construction can be dictated. With beginning pupils in the first grade, only one or two new terms should be given at a lesson.

(b) **EXERCISES.** A series of exercises is suggested here, in which these terms may be taught, introducing them gradually.

(1) Give each child a six-inch square of paper, and conduct the exercise in the following manner:

Let the pupils trace with their fingers around the paper, one edge at a time. If they do not know the term *edge*, give it to them. Ask them how many edges the paper has. Let them find a corner by placing their fingers on a point where two edges meet. Ask them to count and see how many corners the paper has.

Have the pupils place the paper as far away from them as they can on the desk, that is, at the back of the desk. Then have them place it as near to them on the desk as they can, that is, at the front of the desk. Then ask them to place it in the middle of the desk, that is, in the center.

(2) Review the terms taught in the preceding lesson, by having some object moved about on the desk to the back; to the front; to the center. Review *corner*, by asking the pupils to name things which they can see that have corners, and to tell how many corners each object has. Direct

the children to place a square of paper in front of them, with one edge towards them. Develop the terms *front* and *back*, by asking the following questions: "What edge is towards you?" (The front edge.) "What edge is away from you?" (The back edge.) When these terms have been given and understood, you should be careful to avoid confusion in succeeding lessons by always using the terms *front* and *back*, rather than *upper* and *lower* or *nearer* and *farther*. Later in the course these other terms may be used without confusion, but it is safer to avoid them in the first grade.

(3) Have the pupils place a square of paper with one edge toward them on the desk. Develop the terms *right* and *left*, by asking the pupils which is the right hand, and which the left hand; then teach them that the edge next to the right hand is the right edge, and that the edge next to the left hand is the left edge. Ask them to run the finger over the right edge, then over the left edge. Then ask them to show you the front edge; the back edge. Ask the children to compare the edges. Then ask, "Is one longer than the others?" "Are they all the same length?" When the fact that the edges are all of equal length is discovered, you can say to the pupils, "We call this form a *square*, because its edges are alike."

(4) Let the pupils place a six-inch square of paper on the desk, with the front edge toward them. Ask them to show you the front edge, also the back edge. Direct them to take the front edge and fold it to the back edge, and hold it down with the thumb and forefinger of the left hand. Then direct them to flatten it by pressing along the fold with the forefinger of the right hand. If they do not know the term *crease*, explain it to them. After the paper has been creased, unfold it. Ask the children to tell you on which edge the crease begins. The answer should be, "the left edge." Ask them to tell you where it ends. Then teach the fact that the crease runs from left to right.

Have the pupils take their scissors and hold them in the thumb and forefinger, ready to cut. Let them raise the

paper and cut along the crease. They should point the scissors so as to cut the full length of the blade at every stroke, and it may require a number of exercises to teach them to do this successfully. After the sheet is cut apart, ask the children to compare the pieces. They should discover that they are of the same size.

(5) Let the children place a square of paper on the desk, with the edge towards them. Have them fold it as in the previous exercise, then crease and unfold. Ask them how the crease runs. The answer should be, "from left to right." Then ask them to turn the paper so that the crease will run from front to back. Ask the pupils what the paper looks like in this position. Some of them doubtless will discover that it looks like an open book. You can lend interest to the exercise by saying, "We will sing a song out of it", or, "We will play read a story from it." Let the children take these books home, if they desire, and paste some little pictures in them; then return the books to show you.

(6) Have the children fold a book and place it open on the desk in front of them. Ask them to take the front edge, fold it to the back edge and crease it. Direct them to unfold the paper, and ask them what it looks like. Some will discover that it looks like a window. Ask the children to take their scissors and cut out one pane; then they may cut them all out.

(7) Let the children place a six-inch square of paper on the desk with a corner toward them. Ask them to show you the front corner; the back corner. Direct them to fold the front corner to the back corner and crease the paper. Ask them to unfold and tell you where the crease begins and where it ends. The crease extends from corner to corner. Ask the children to fold the paper again on the crease. Let them play that this is a doll's shawl. Have the class take scissors and cut a fringe around the shawl. To do this, unfold the paper and cut slits on each edge, making the strips about a quarter of an inch wide and an inch long.

(8) Have the pupils place a square of paper in front of them with the edge toward them. Direct them to fold the front edge half way up, so that the piece folded looks like the piece above it. Have them crease the paper and unfold, then turn the sheet around so that this crease is at the back. Let them fold the edge at the front to the crease. Crease and unfold. This gives two creases and three folds, or panels, in the sheet. Let the children take their scissors and cut the sheet into three strips along these creases; then direct them to cut these strips in two, lengthwise. Use these narrow strips to paste into links for making a chain.

(9) From a six-inch square have the children cut as large a circle as possible. Call it the moon, a cake, a pie, a plate, or anything the children wish. While cutting, direct the children to turn the paper so as to assist in getting it round. They should not cut in short, choppy clips. Let the children lay this circle on their desks and cut another a little smaller.

(10) Distribute to each child a six-inch square, and direct the children to cut it from corner to corner without folding. Let them place one piece with the long edge towards them, then fold the right corner to the left corner and crease and cut on this fold. Have them do the same with the other piece. Tell the children that you have a puzzle for them, and ask them to arrange the four pieces into a square.

Caution. In general, take this work slowly. Give an exercise of this kind not oftener than twice a week, if the class seems wearied by the required concentration.

8. Fruits, Vegetables and Animal Forms. By this time the children can control their scissors, but much of their practice has been along set creases and lines. Now we are ready for free expression, the child being unguided except by his mental image of the object to be cut; this he must hold in his mind as a whole while reproducing it.

The pear and apple are good fruits to begin on, as they vary in form, and can be cut life size, from quarter sheets of 9x12 paper. This is a size particularly desirable, since

it does not fall around the hand by its own weight. If possible, allow the pupils to handle the objects to be cut before attempting the cutting, as by so doing they get a better idea of the form and size. When the cutting begins, let each child cut freely. Allow any child to try again, if he sees any errors in the product which he wishes to correct.

In case scissors are not available, the forms may be torn. In that case, rough, woolly-edged objects are easier to make,

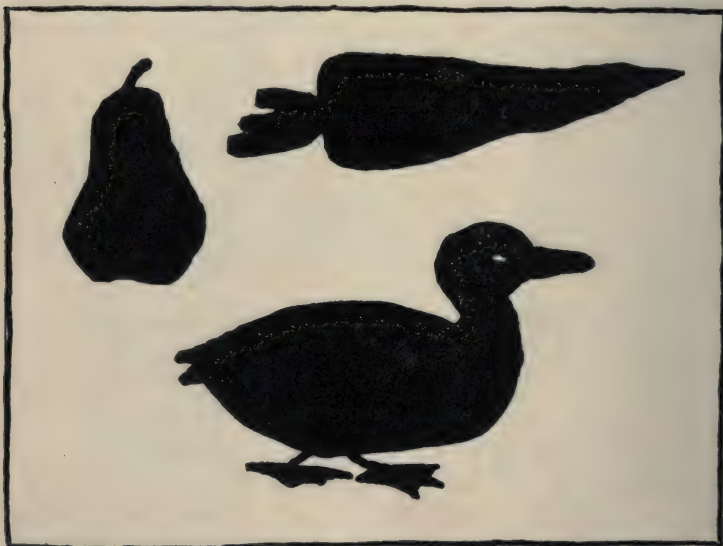


FIG. 1

like furry animals, trees, and rougher vegetables, such as the carrot, the pear, and the duck. Cut only the essentials of the form, leaving out the tinier characteristics, like rootlets or details of feet, etc. See Fig. 1.

Caution. Do not force a young child into discouragement by being too critical. The size and form should approximate the original, but try to lead the child to see his own mistakes by holding the cutting beside the object.

9. Thanksgiving Dinner Table. Each child may cut a plate from a quarter sheet, a knife, a fork, and a spoon,

each being cut the long way of a quarter sheet, and then some other necessity for the furnishing of a table. Each may mount his table furnishings, properly placed, around an oblong, like the top of a table, drawn on the blackboard, or on a paper tablecloth on a real table. Through this exercise the children will learn something of the art of setting a table.

10. Furniture and Utensils; Christmas Tree Ornaments.

Toys and community cutting of furnishings for a house provide good exercises for the winter months.

(a) FURNITURE AND UTENSILS. These may be cut without perspective, and cut large enough to be easily handled; nothing should be made from less than a quarter sheet of paper.

(b) CHRISTMAS TREE ORNAMENTS, TOYS. These may be cut after studying the objects, or from imagination, if the children are very familiar with them. See Section 15.

11. The House. A series of four rooms—a kitchen, a living room, a bedroom and a dining room—makes a good

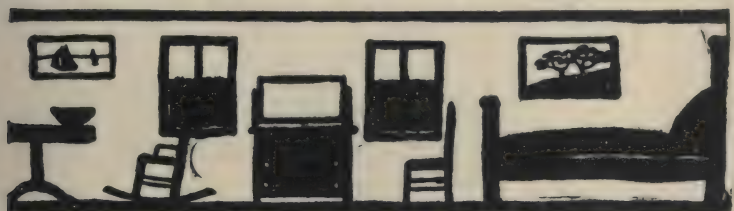


FIG. 2

problem. In this the sizes of papers must vary somewhat, to keep the right relation of sizes in the furniture. The following sizes are suitable:

For windows, beds, bureaus, bookcases, couches, and other large pieces, the half (6x9) sheets; for chairs, tables, children's beds, pictures, grates and stoves, the quarter sheets. For tables and stoves, the quarter sheets may be used the long way, from left to right; and for chairs, the other way. For coal-hod, pails, pans, or other small things about a house, an eighth of a sheet is sufficient.

In community work every child should be represented by his best effort. Each may choose what he will cut, each cutting a variety, and from these the furnishings may be selected, or the work may be allotted. Fig. 2 shows one room, and the series may be mounted in a row on blackboard or wall paper, strips of paper being used to separate the rooms and for floors and ceilings. The choice and style of furniture and equipment cut will depend on that to which the children are accustomed.

The illustration on page 45 shows what was done in the Stevens Point (Wis.) Practice School. However, some of the articles shown are too difficult to be attempted below the third grade.

12. Spring Work. Hens and chickens, gardening tools—as a spade, hoe, rake or watering pot—plows, vehicles and wheelbarrows may be made during this season of the year.

Hens and chickens may be cut in proper relation to size, and each child may mount a hen and several chickens as an individual arrangement. See Fig. 3.

Vehicles should be cut as side views, without perspective.



FIG. 3

13. Exercises in Stitching. Before proceeding to construct other articles, the following exercises in stitching

should be given: (1) the running stitch, (2) the back stitch, (3) the overcasting stitch for raw edges, (4) the overseam stitch.

These exercises may be carried out as follows:

(1) Take a piece of checked gingham 12x3 inches. (Checked cloth is better, since the checks help in keeping the seams straight.) Place the two ends together, and make a seam in a running stitch along one long side, about three-eighths of an inch from the edge.

(2) About a quarter of an inch inside the running stitch seam, make a line of back stitching.

(3) Overcast the raw edges of the running seam.

(4) Turn in the other long edges about a quarter of an inch, and overseam the two edges together.

These exercises will give all the necessary stitches for the bean bag and other articles to be made in the fall.

14. Autumn Work. A book, an envelope for preserving work, paper napkins, a bean bag, a holder, and a penwiper may be made during the fall term.

(a) **Book.** Some construction work should be carried along with the cutting, and as soon as the children can cut simple objects, let them use some of their cuttings in making articles of use. Because of its simplicity, a book is selected for the first exercise of this kind.

Cut papers, or use some already cut, about six inches square. Give each child three or four sheets. Have each sheet folded through the middle. The folding should always be from front to back. Cut squares a little larger than these sheets from colored construction paper or brown manila paper, and fold the same as the first sheets, for the cover. Place the leaves within the cover and punch a hole through all, in the center of the crease. An inch above and an inch below this, make holes. The upper hole may be named No. 1; the middle, No. 2, and the lowest, No. 3. Give each child a needle and coarse thread. (See Fig. 4.) Sew down through No. 1, up through No. 2, down through No. 3, up through No. 2, and tie between No. 1 and No. 2, which is on the inside

of the book. This book may be used for writing letters, exercises or words.

(b) ENVELOPE. Manila paper, 10x16 inches in size, will be needed for this exercise. Place the paper on the



FIG. 4

desk with the short edge toward the front. Fold this edge to within two inches of the back edge, the two inches being judged by the eye. The teacher should show this to the children first by folding a sheet of paper. The two inches are to be used for the flap. The two corners of the flap may be placed together and rounded, the two sides

pasted up, and the lap turned down. See Fig. 5.

(c) PAPER NAPKINS. You should have 9-inch squares of tissue paper for this exercise. Select prints of very simple flowers, in color, or black and white. Seed catalogues contain good material for this work. Each child should place each corner of his square successively over the print which he has chosen, and copy through, with colored crayons or paints, enough to fill the corners well. These napkins may be folded once each way to quarter size.

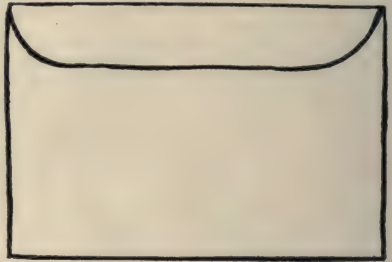


FIG. 5

(d) BEAN BAG. This bag may be made of checked gingham 5x10 inches in size. If necessary, you should teach first the back stitch on another piece of the goods (Section 13). Sew up the two sides of the bag and turn the seams

inside. Turn in the two open edges, and overseam these two edges together, leaving an opening large enough to fill through. If necessary, teach the overseam stitch (Section 13). Fill the bag with beans, then complete the closing of the seam.

(e) HOLDER. A holder may be made exactly like the bean bag up to the point of the turning. After turning the cover for the holder, put inside several squares of thick material, like flannel or heavy suiting. Close the edges as in the bean bag. Tie with white cotton in the center and half way between the center and each corner. For tying use a double thread of darning cotton, and tie in a hard knot.

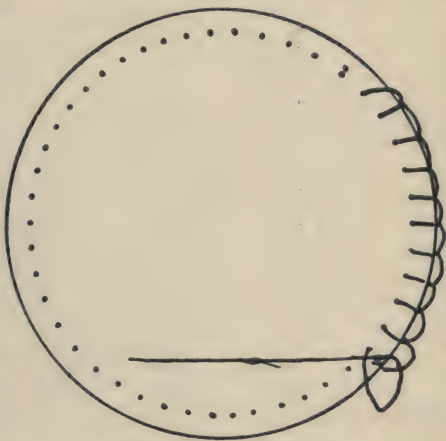


FIG. 6

(f) PENWIPER.

Draw on the same piece of tag board two circles, one within the other. Make the larger $3\frac{1}{2}$ inches, and the smaller 3 inches in diameter. On the circumference of the smaller circle punch holes one-half inch apart. Teach the stitch in Fig. 6, and border the circle with it, using colored raffia or yarn. Cut two circles of white wool goods a trifle smaller, and tie in with a raffia knot in the center. See Fig. 6.

15. Christmas Tree Ornaments. (a) LANTERNS. Cut drawing papers 4x6 inches. Color one side of these in varying colors, with crayons or paints. Fold the long edges together, crease and cut strips a quarter of an inch wide and to within a half inch of the edges, as shown in Fig. 7. Cut one strip entirely off, to use as a handle. Paste the short edges together and attach the handle, as in Fig. 7.

(b) **CORNUCOPIAS.** Cut drawing paper into six-inch squares. Tint the paper, roll into cornucopia form and



FIG. 7

paste. Attach a loop of paper at the upper corner.

(c) **PAPER CHAINS.** Cut six-inch squares of variegated papers into one-half inch strips, and paste into links for chains. Put one link through another each time before pasting, to form a continuous chain.

(d) **STARS.** Fold a three-inch circle once through the center, as in *a*, Fig. 8.

8. Fold half the straight edge of this semicircle over, then fold like *b*. Draw lines as in *c*, and cut on those lines. The result will be a

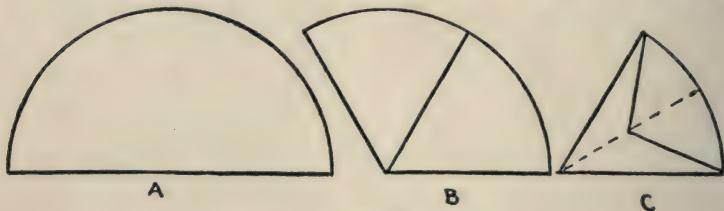


FIG. 8

six-pointed star. These stars may be colored, or this cutting may be used as a pattern in making the stars from colored papers.

16. Triangular Box. Place on the desk a nine-inch, equilateral triangle of construction paper, with an edge

toward you. Place the left corner to the right and crease. Unfold, and turn another edge toward you. Repeat the fold, crease and unfold.

Place the third edge next to you and repeat the fold, and unfold. Place a corner toward you; fold it to the middle of the opposite edge, crease and fold the same corner back to the middle of the crease, and crease it.

Repeat the same folds with the remaining corners. Punch and tie, as in Fig. 9.

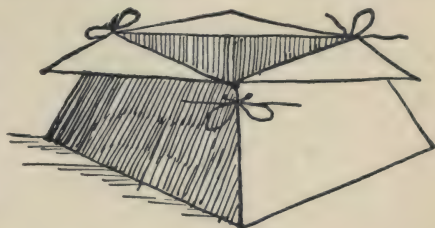


FIG. 9

17. Match Scratcher. Cut five-inch circles of heavy cardboard. Cut three-inch circles of soft paper, and fold and cut for a six-pointed star, as in Fig. 8. Trace this on sandpaper and cut it out. Paste the sandpaper star on the cardboard circle. Punch a hole and tie in a hanger of raffia or ribbon.

18. Valentines. Cut patterns of hearts from six-inch squares folded through the center. Lay this pattern on

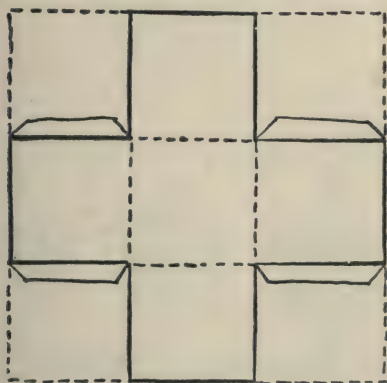
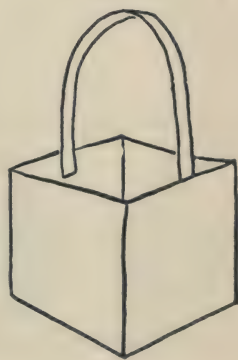


FIG. 10



white drawing paper, draw around it, and cut it out. Give each child a piece of flowered wall paper, and allow him to

cut out and arrange as many of these flowers on the heart as will fill the space well. If the children can write a verse, make the pattern of a double heart, decorate the outer one, and write the verse on the inner one.

19. Easter Eggs. Cut patterns of eggs, freehand, from soft paper, and use these for tracing on heavier paper. Color the drawings and cut them out. See Fig. 38.

20. May Baskets. Make cornucopias, as for the Christmas tree. Fold six-inch squares of paper into nine squares and cut as in Fig. 10. Fold and paste, and attach handle.

21. Cover for Drawings. Cut papers of suitable size for a cover for June drawings. Tint or stain the paper, if not

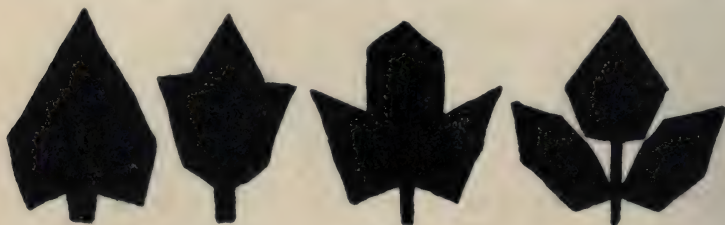


FIG. 11

already toned. Cut a conventional leaf (Fig. 11) and draw around it in a border, as in Fig. 12. (This figure shows conventional leaves, which are simplified forms.) Paint forms

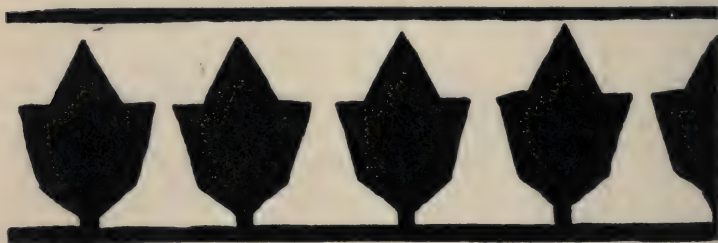


FIG. 12

and margin lines in black or a harmonious color. Make the work large, even if the figure is repeated but a few times.

SECOND YEAR

22. Introductory. The work of the second year is a continuation of that of the first. Cuttings representing more detail can be attempted, and more complex objects can be constructed. Let the children begin the work of this year by cutting fruit on branches, vegetables with tops, trees with and without foliage, log houses, Puritans, and a modern village.

23. Fruits and Vegetables. Cut the body of the fruit or vegetable first, leaving space for the foliage; then add the foliage. See Fig. 13.



FIG. 13

24. Trees. In trees with foliage, cut or tear the foliage first, adding the structure. When without foliage, cut the trunk first, working outward from larger to smaller branches. See Fig. 14.

25. Puritan Poster. Cut out figures of Puritans, in high-crowned hats, knee breeches and cloaks, and carrying guns. Cut out the front views of log cabins, and arrange a Puritan, a cabin and a few bare trees upon a mount, for a poster.

26. Village. A modern village may be cut and mounted by a method similar to that used for the rooms of a house in the first year work. The village might contain dwelling

houses, a schoolhouse, a church, various shops, trees, lamp posts, people, horses and wagons, and any local features familiar to the children. Cut all without perspective, and



FIG. 14

mount them on a level base, as in the rooms. This may be mounted on green wall paper, half width, the green giving an out-of-door effect. Or it may be mounted on the blackboard, chalk drawing supplementing the cuttings by the addition of clouds, distance or foreground.

27. Santa Claus. As the holiday season approaches, the children will enjoy cuttings and construction work relating to Christmas. Santa Claus, in or out of his sleigh, with or without reindeer, according to the skill and interest of the children, is a good cutting with which to introduce these exercises.

28. Christmas Tree Poster. The teacher may paint or draw with colored chalk, on manila paper, a tree at least three feet high. The children may then cut from the soft paper, candles, ornaments and gifts, coloring them as desired. These may then be pasted in a pleasing arrangement on the tree.

29. Winter Sports. This work will require figures of children in action, as in skating, coasting and snowballing. For the action, allow children to pose before the class for a study of the position and proportion of parts of the figure.

These figures may be cut in frames, as shown in Fig. 15. For cutting in a frame, cut the sides and top of the frame first, then cut the figures to fill the space well.



FIG. 15

30. Poses and Games. Children under umbrellas, children engaged in sports and games, as flying a kite, jumping rope, or playing ball, are interesting for the spring season. These may be cut in one piece, or in parts, and arranged



BOOK OF SEEDS

FIG. 16

afterward. Here, again, it will be necessary to study the poses taken by children in these various activities.

31. Books for Seeds. Early in the fall let the children make a book for seeds. These books are designed for

mounting seeds collected by the children in the autumn in the nature study work. The books may be made from drawing paper folded from 4x12 to 4x6 inch sheets, opening lengthwise. The cover may be of heavy paper, decorated with a border of units based on some seed form, as the maple keys or rose hips. See Fig. 16.

32. Pumpkin Masks. These are made from nine-inch circles of drawing or heavy manila paper. Color each circle as if it were a pumpkin,

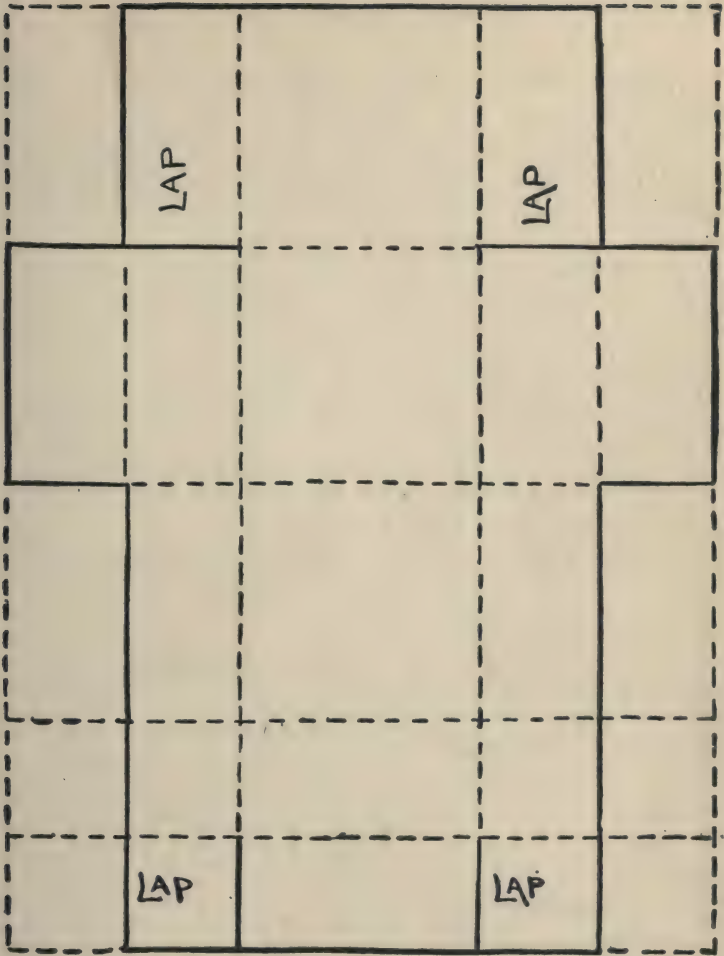


FIG. 17

as if it were a pumpkin, putting in darker lines for the creases. Cut a stem and paint it green. Cut a circle of the same size from soft paper, and practice cutting holes for the eyes, nose and mouth, so that the mask will fit the individual face. Try until the holes are in the right place. Place this pattern over the colored circle, draw through the holes and cut around these lines. Paste the stem at the top of the

mask. Add eyebrows with black paint or crayons, and punch holes a little above the height of the ears, through which strings may be put to fasten on the mask. These masks may be worn at a Hallowe'en party or in a jack-o'-lantern parade. See Fig. 17.

33. Braiding and Cording Raffia. (a) BRAIDING. The three-strand braid is suitable for this grade. Select three broad strands of raffia, wet them, and tie them in a knot at one end. Pin the knot to something and braid from the knot, flattening the braid to make it as wide as possible. This braid may be sewed into a little round mat, suitable



(a)

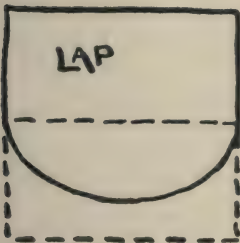


FIG. 18

(b)

for a penwiper top. Sew the braid with split raffia, while the former is damp and easily curved.

(b) **CORDING.** The simplest cord is made by twisting a single strand or two strands of raffia very tightly, then putting the ends together, letting the twist adjust itself into a cord.

34. Colonial Cradle. This article is best made of tag board, or other tough, stiff paper, though not too stiff to fold. Fold a six-inch square into sixteen squares, giving directions for each fold very carefully. Cut off one row of squares. Place the short edge of the remaining oblong toward you, and fold it up to the first crease. Unfold and turn it with a long edge toward you, folding the edge toward you to the first crease. Turn the paper around and repeat the fold. Cut as in Fig. 18 (a).

For the rockers, you may use two of the squares of the row cut off. Fold these squares through the center; curve one-half of each square for the rockers, holding the two together while cutting, and use the other half for a pasting lap. Fold and paste the cradle, putting the rockers near the ends of the base, pasting the laps toward the center. See Fig. 18 (b).

35. Raffia Napkin Ring.

Cut tag board $6\frac{1}{2} \times 2$ inches, and paste the strip into a ring, lapping the ends one-half inch. Wind this, vertically, with moist, flattened raffia, lapping the strands so that the tag board will not show

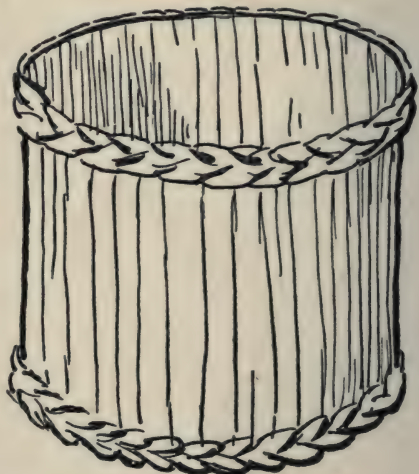
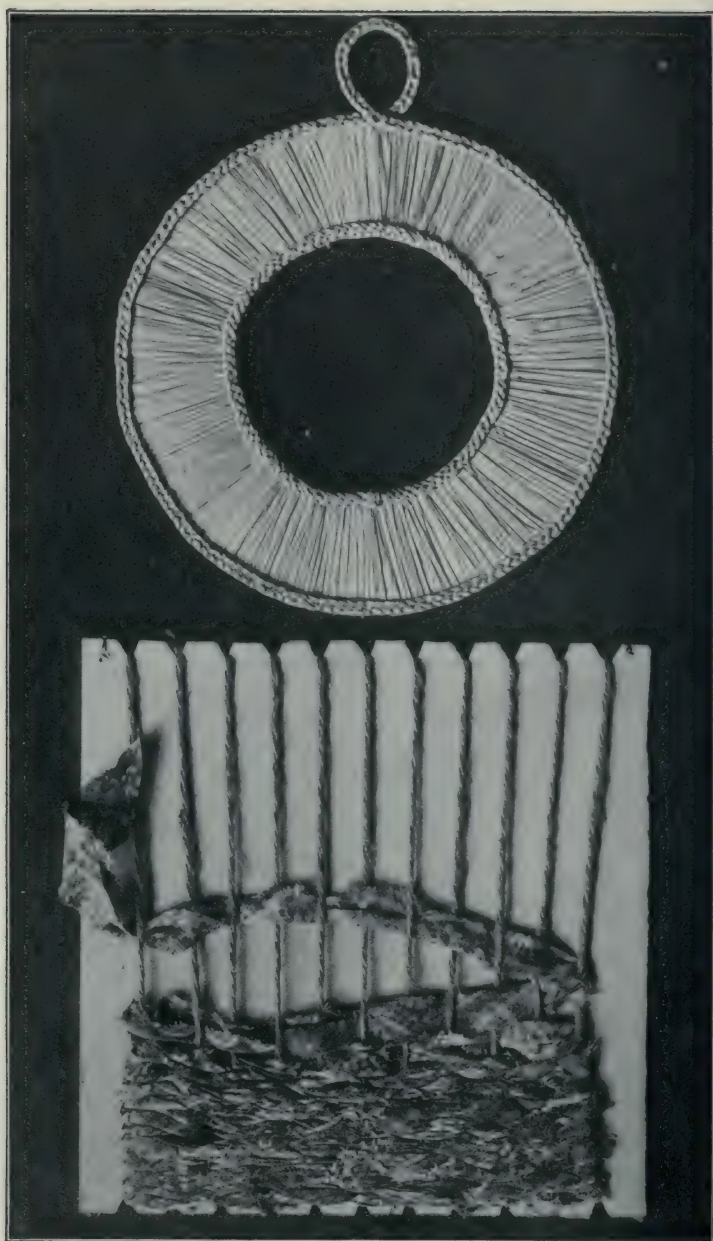


FIG. 19

through when the raffia is dry. Finish both edges of the napkin ring with three-strand braid. See Fig. 19.



PICTURE FRAME

WOVEN HOLDER

36. Woven Holder. Make a loom from a six-inch square of heavy cardboard, making notches one-half inch apart and a quarter of an inch deep, across two opposite sides of the square. Thread this with carpet warp, or other soft strong twine, of dull tone. This is the warp of the weaving.

For weaving, use bias strips of soft cotton or wool goods, cut about one-half inch wide. Children may bring odds and ends of pieces from home, and if in cutting them on the bias they prove to be too short, they may be sewed together into thirty-inch lengths before weaving.

Weaving needles can be bought, being made of flat, narrow metal strips. They may be made from heavy wire cut in eight-inch lengths, one end filed so that it will slip through the warp easily, and the other end turned with plyers into a loop for threading. If needles are not available, this weaving can be done entirely with the fingers.

Thread the needle, and weave over and under across the loom, back and forth, each time pushing the weaving as closely together as possible, to make the textile heavy and firm. When a new strip is added, lap it in the weaving for at least two inches. See Fig. 20.

The bias strips give a soft effect, as they ravel slightly in the weaving. When the loom is full, cut it away, if the holder cannot be slipped off. Make a loop of the goods used in weaving, and attach to one corner of the holder for a hanger.

Squares of this nature may be made and sewed together into pillow covers, couch blankets, or small rugs. If any of these articles are needed in the school, the children might contribute their work for such a purpose, many sharing in the sewing. Looms somewhat larger may be used to advantage for community work.

37. Sewing Bag. The sewing bag may be made of gingham, cut in strips of 20x8 inches. Fold one strip together and sew up the side seams with the back stitch. Put a one-inch hem around the top and run above it a welt a quarter

of an inch wide. Run into this welt two cords, one coming out at each seam. Overcast the seams.

If the nature of the school is such that it offends the boys and the community to have them sew, the boys may substitute some other exercise for this bag. The bag may be made before the holder, and the boys might make the weaving needles at that time.

The sewing bag will take a number of lessons, and boys might do some whittling during those lessons. They will

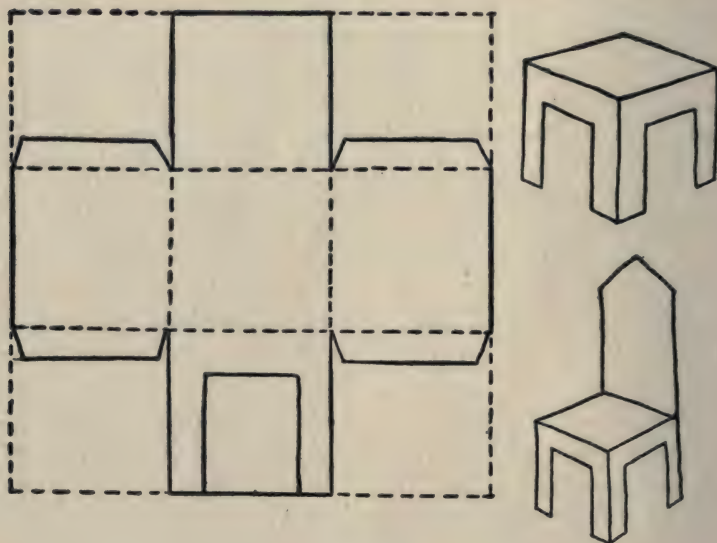


FIG. 21

know that soft woods whittle easiest, and will show by their interests what they wish to make. Among simple things that they might whittle out are a seed label, a winder for fish line, a pencil sharpener and a letter opener.

38. Screen. Place a six-inch square of paper on the desk, with an edge toward you. Fold the front edge half way back, so that the part turned over will be the size of the part beyond. Crease and unfold. Turn this around, and turn it over. Fold the edge now at the front to crease, crease

and unfold. You have a three-paneled screen that will stand. Fold the panels together and cut out pieces, to give the effect of legs below the panels.

39. Soldier's Cap. Make a hat from a six-inch square first, to teach the process; then the children can make one

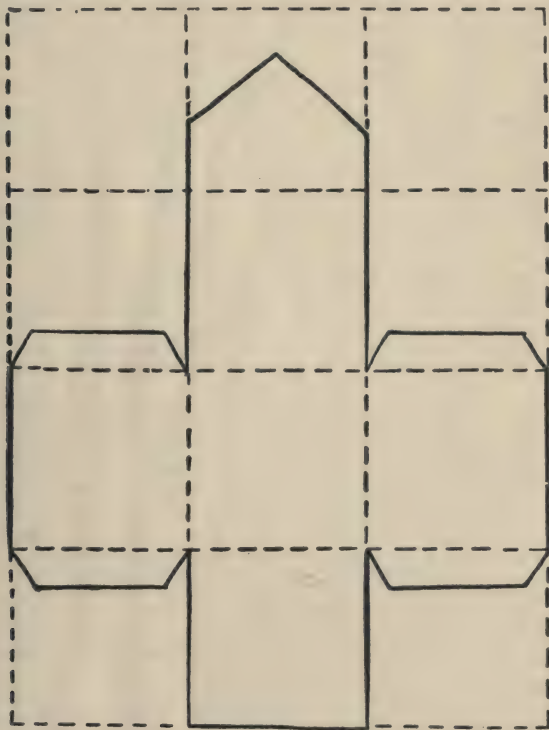


FIG. 22

of wearable size at home, using newspaper or wrapping paper. A cap of this kind requires a square of 24 inches, at least.

Place the six-inch square on the desk with an edge toward you. Fold the front edge to the back edge, and crease. Turn this so that the fold is on the left, and the open, long edges on the right. Fold the front edge to the back edge, and

crease. Turn the paper so that the upper right corners are toward you. Fold three of these corners together to the back corner, and crease firmly. Turn the paper over. Fold

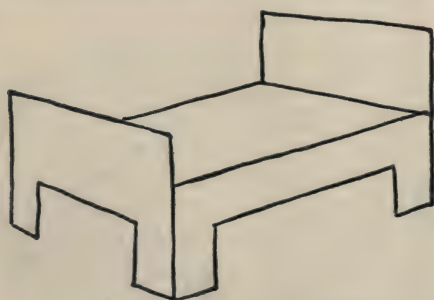
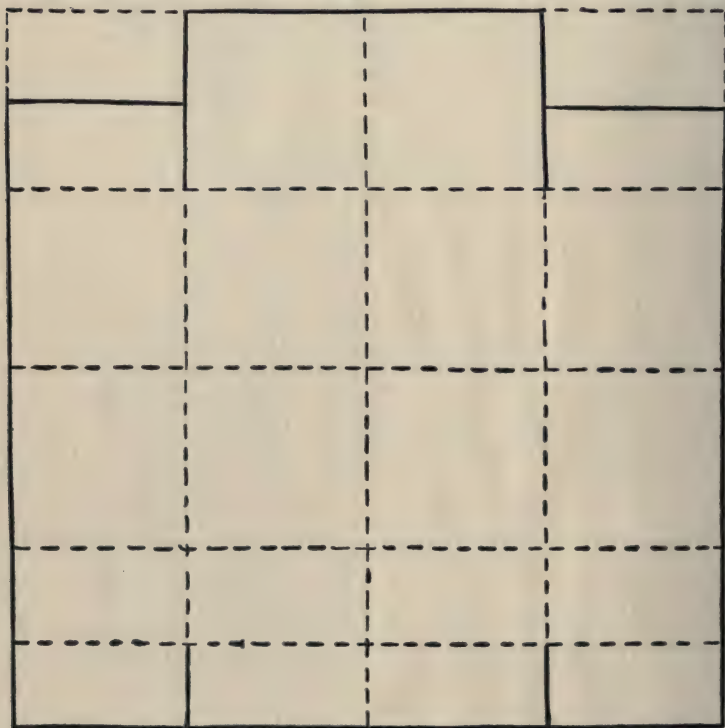


FIG. 23

the front corner to the back, and crease. This completes the structure of the cap. The long edges at the opening may be turned up a half inch, and a tassel may be cut and pasted or tied at the top. For the tassel cut a strip 1x6 inches, fringe it the short way, and roll or fold it into a tassel.

40. Table. Place a six-inch square of tag board or heavy manila paper with an edge toward you. Fold the nearer edge up half way, and crease. Unfold and turn it around. Repeat the first fold, and unfold, placing the paper with the folds running from back to front. Fold the nearer edge half way up, crease and unfold. Cut as in Fig. 21. Fold and paste as in the illustration, then cut out legs from one side. Lay the piece cut out on the other three sides for a pattern, so that the legs will be uniform.



FIG. 24

41. Chair. Place a six-inch square of paper, like the table, with an edge toward you. Fold the nearer edge to the farther, and crease. Turn it around and repeat the fold. Cut off one strip. (See Fig. 22.) Place the remaining oblong with a short edge toward you, and fold the nearer edge to the farther one; crease and unfold. Fold the nearer edge to the crease, crease and unfold. Turn it around and repeat the last fold. Cut as in Fig. 22.

Paste a part of the strip first cut off up the back of the chair. If the children are able to do so, they may cut out the legs of the chair as they did those of the table.

42. Bed. Fold a six-inch square into sixteen small squares. Fold one edge to the first crease, and unfold.

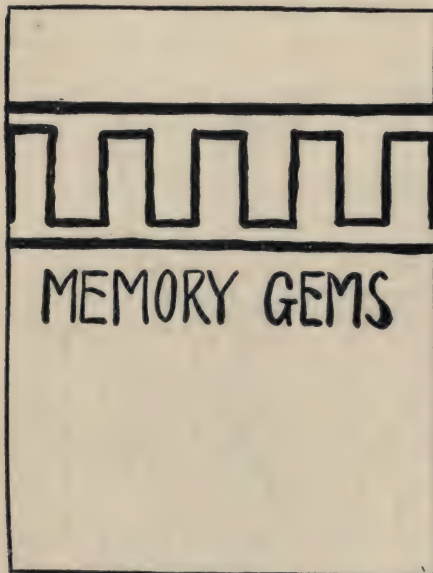


FIG. 25

Cut as in Fig. 23. Fold and paste. Cut pieces to fit both head and foot of bed, and paste on the outside to strengthen it.

43. Valentines. By the aid of patterns, cut out two hearts, one from a five-inch square and one from a three and one-half-inch square. Decorate the two as in the first year's work, but use smaller flowers. Fasten the pieces together.

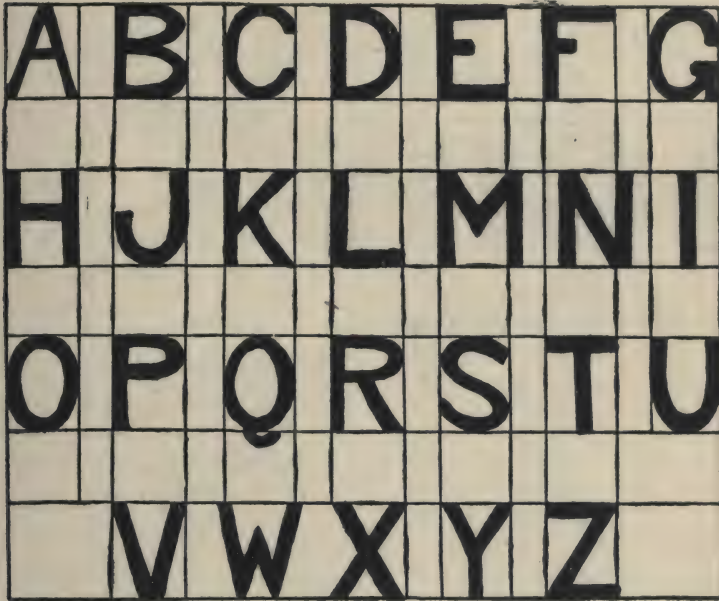
Cut out hearts from white drawing paper. Cut out pictures of chil-

dren from periodicals and paste on the hearts. Color these pictures with paints or crayons. Tie in a ribbon or cord, to hang by.

44. Easter Rabbit. Make patterns about six inches high, like Fig. 24. These patterns may be used in cutting the rabbits from rather heavy paper. Make the bodies brown and the garments of bright colors. Paste an oblong of paper, 1x4 inches, by one end, on the back of each rabbit, as a brace, to make it stand up.

45. Books for Quotations. Use writing paper of the size used in school. Make a heavier cover of wall paper or construction paper. See Fig. 25 for suggestions for decoration.

46. Books of Flowers. Use drawing paper, on which flowers may be painted, or bind some already painted, cover-



ing the books as in the book for quotations. See Fig. 26 for suggestions. If printing is attempted, print between two lines a half inch apart, using pencil first and retracing in ink or paint.

THIRD YEAR

47. Introductory. The cutting in the third grade can represent animals, figures, wagons with horses, or a parade—as a circus, a carnival or any street pageant the children have seen. In the country this might represent farmers going to market with a variety of vehicles and loads.

48. Animals and Figures. These may be cut or torn from paper, either from living models or from pictures. In cutting children's figures, the pose should always be studied previous to the cutting.

49. Wagons and Parade. If it is too difficult to manage the cutting of horses and wagons in one piece, they may be cut separately and pasted together. Cut side views only.

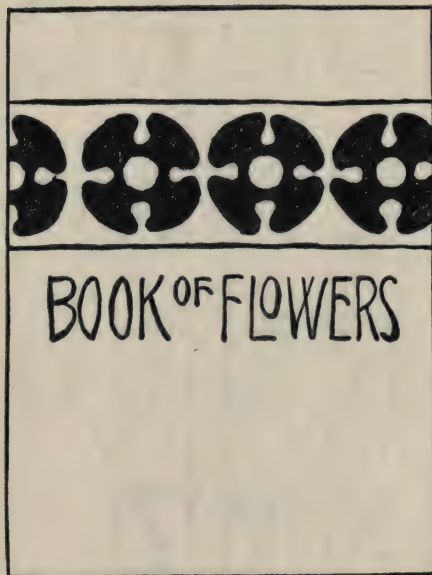


FIG. 26

The parade may be a community exercise, each child cutting the part in which he is most interested. These cuttings may be mounted as other exercises of this kind have been.

50. Santa Claus. Santa Claus cuttings for this grade may be in a frame, cut from 6x9 inch sheets. If desired, three scenes may be cut—Santa Claus coming, Santa filling the stockings, and Santa going away in his sleigh. See Fig. 28.

51. Gardening. The occupations of a child

throughout the making of a garden, as spading, planting, watering, weeding and hoeing, make good problems for the spring. These subjects may be cut in frames, each child making a set; or each part may be cut and arranged with the others later. When one of these cuttings is to be given as a lesson, the class should have an opportunity to see a child with the proper implements, posing as for that particular occupation. These may be cut in frames, as in Fig. 29.

52. The Farm. This may be planned to occupy a black-board space of at least 8x3 feet, or to be mounted on an equally large piece of wall paper. The cuttings should be mounted to show distance, the larger ones being in the foreground. This helps to avoid discrepancies resulting from the variation in the size of the cuttings. Distant trees and



FIG. 27

roads may be drawn in chalk, to supplement the cuttings. Each child may cut two or three of the things needed, being



FIG. 28

guided in the selection by the equipment and appearance of familiar farms. The following list is suggestive: a house,



FIG. 29

a barn, sheds, a corn crib, a windmill, a bird house, chicken coops, cows, horses, sheep, pigs, ducks, hens, turkeys, a dog, men and women at work, children at play, shade trees, orchard trees and fences. See Fig. 27.

53. Envelope. This should make an envelope 10x7 inches when finished, and should be large enough to hold drawings on papers 9x6 inches. Use tag board 12x16 inches. Dictate the drawing according to Fig. 30, and cut on heavy lines.

54. Book of Trees. This is to bind the drawings or cuttings of trees, or the written language and nature study exercises on trees. Make the leaves of drawing paper, and

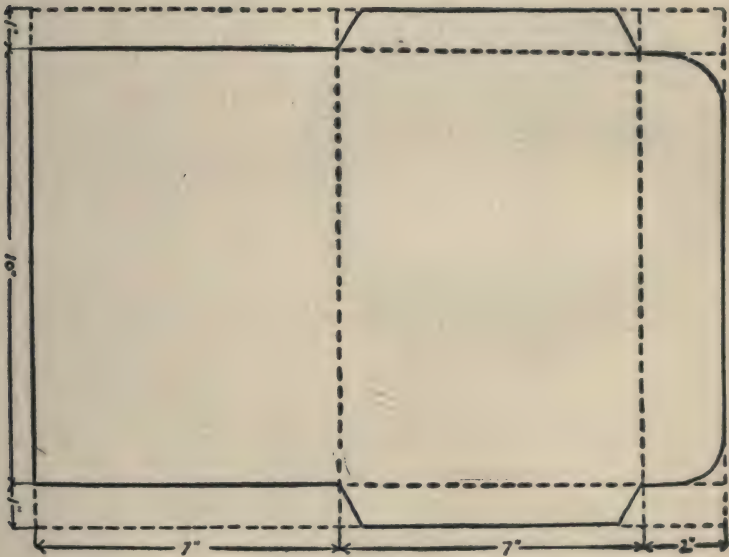


FIG. 30

the cover somewhat larger, of heavier paper, toned. Sew this as in previous books. This cover may be decorated in any suitable way, using the knowledge gained in the drawing lessons and some of the results of previously studied design.

55. Book of Leaves. This book may be used for mounting classified pressed leaves, or for drawings of leaves. Select

materials according to the use to which the book will be put, and decorate with a design suggesting leaves. If the book is to be used for drawings, use drawing paper for the leaves of the book and construction or wall paper for the covers. If the book is to be used for mounting pressed leaves, a smooth wrapping paper is desirable for the leaves of the book, both in texture and color. For this use, cut the sheets 14x5 inches, and fold through the center the short way. Cover with wall or construction paper, and if that is not available,

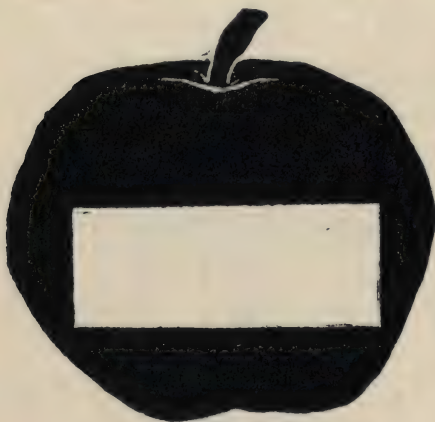


FIG. 31

a darker, heavier wrapping paper may be used. The paper used for meat wrapping works in well for covers, though it is not so easily decorated as are manila papers. It is satisfactory where only lettering is to be used.

56. Thanksgiving Dinner Cards. These may be used for place cards to seat guests. Cut paper patterns like fruits

or vegetables, as apples, pears, pumpkins, beets and carrots. Place these patterns on white drawing paper and draw around them. On this form draw an oblong $2 \times \frac{3}{4}$ inches, for writing the guest's name. Paint the rest of the form as nearly as possible like the object it represents. See Fig. 31.

57. Post Card Album. Make leaves of tag board or other tough paper by folding sheets $15 \times 5\frac{1}{2}$ inches through the center the short way. Lay a post card on each leaf, to locate the slits that need to be cut to hold the cards. Measure $\frac{3}{4}$ inch from each corner of the card on both edges and place dots there. Place corresponding dots on the leaf of the book. Connect the dots for each corner with a straight line, and cut on these lines for the slits to hold the

cards in place. Bind by sewing on a cover cut $15\frac{1}{2} \times 6$ inches, the cover being of like material or something heavier.

Decorate simply, in straight-line borders, which, with the printing of the name of the book, may be done first in pencil, then retraced with brush and paint. Letters for such a cover should be not less than one-half inch high.

58. Sled. Tag board $8 \times 4\frac{1}{2}$ inches will be needed for this exercise. Place the paper with the long edge toward you.

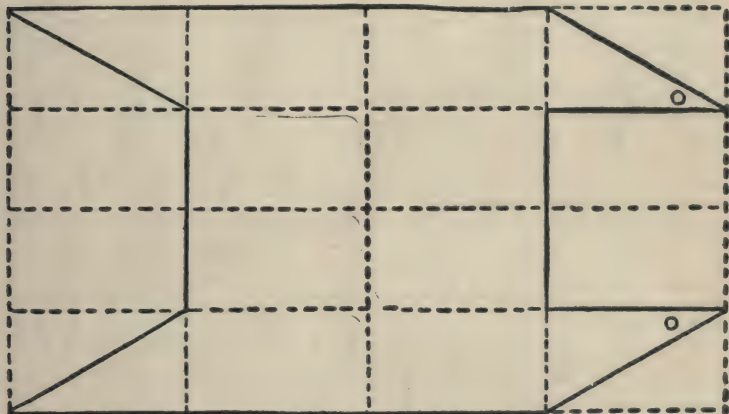


FIG. 32

Fold the front edge to the back edge, crease and unfold. Fold the front edge to the center crease and unfold. Turn the paper around and repeat the last fold. Place the paper with a short edge toward you. Fold the front edge to the back edge, crease and unfold. Fold the front edge to the center crease, crease and unfold. Turn the paper around and repeat the last fold. Draw lines, as in Fig. 32, and cut on the heavy lines. Punch holes in the front points of the runners, fold the runners down, and tie in a cord.

59. Picture Frame. Cut a ring by making concentric circles, the outer one 5 inches in diameter, the inner one $2\frac{1}{2}$ inches. Wind this with moist, flattened raffia, as in the second year napkin ring, lapping the strands well over each

other. Finish the edges with a three-strand braid, making a hanging loop of the same. See Fig. 33.

60. Flower Pot Cover. Cut four or five panels, according to the size of the flower pot to be covered, $4\frac{1}{2}$ inches high, 3 inches wide at the top and $2\frac{1}{2}$ at the base. Punch holes one-half inch apart and one-quarter inch in along the long edges of these panels. Lace and tie with raffia or cord. See Fig. 34.

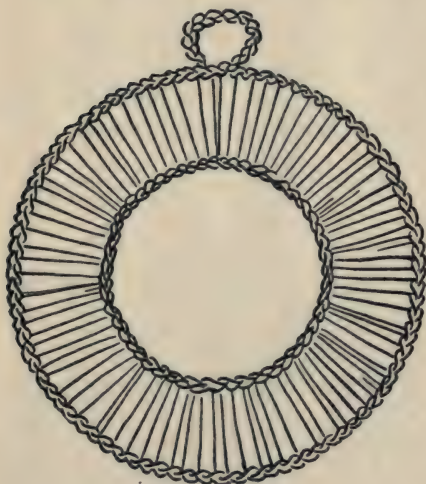


FIG. 33

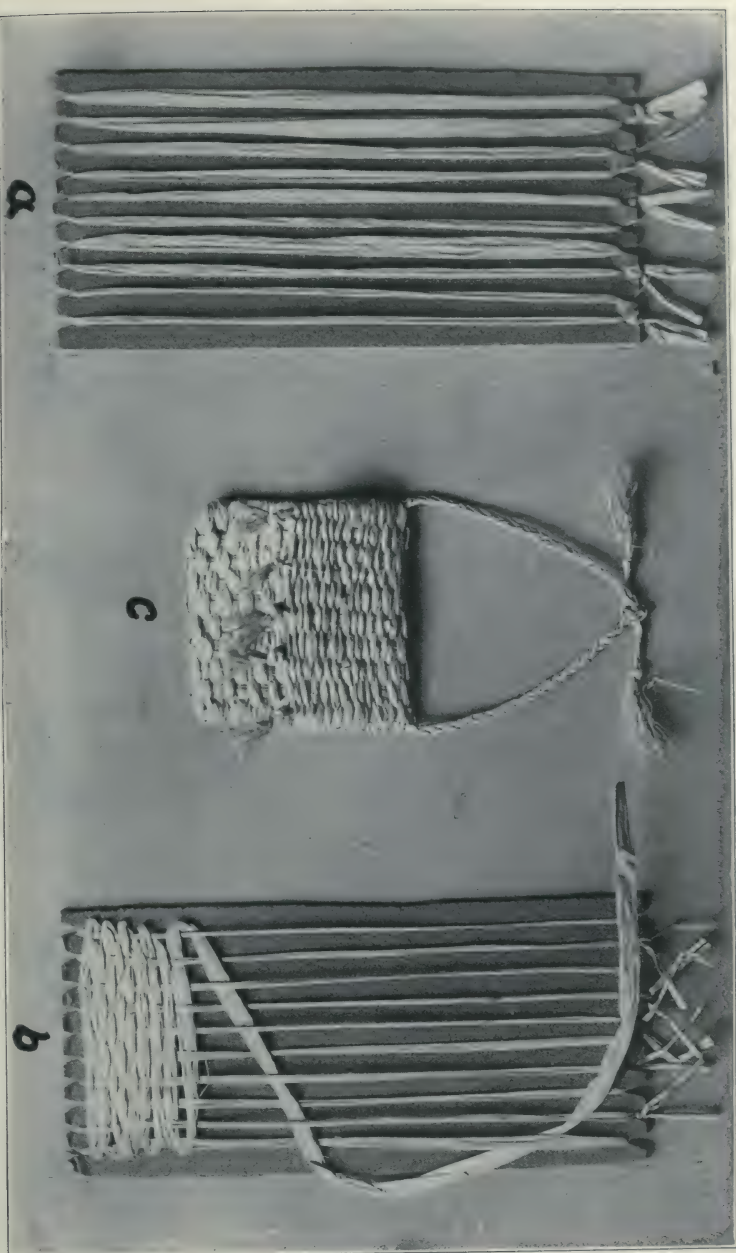
61. Woven Purse. Make a loom of heavy cardboard $6\frac{1}{2} \times 3\frac{1}{4}$ inches. Across the short ends cut notches $\frac{1}{4}$ inch deep and $\frac{1}{4}$ inch apart. Thread

this loom with moist raffia strands, with knots at one end, as in (a) Fig. 35. These knots will later make finishing tassels. Use darning or tape needles, thread with moist raffia, and



FIG. 34

weave under one and over one until the loom is full, pushing back the weave, to make it compact, every time the needle



WOVEN PURSE

runs across (b). Care must be taken not to draw the weaving threads tightly enough to make the width uneven. When the loom is full, cut or slip off the weaving. Cut the knots with even ends, and fringe the same with a pin for tassels. Turn up the end not tasseled $2\frac{1}{2}$ inches, and sew into a purse, sewing with split raffia, and turning it after it is sewed. The tasseled end is the lap to cover the opening (c).

A piece of braided raffia may be attached as a handle, or sewed across the middle of the back from seam to seam, for a finger strap. A fastener, such as is used in dressmaking, should be sewed on for closing the purse. This fastener should also be sewed with split raffia.

62. The Square Box.

See *Drawing*, page 115.

63. Valentines. A valentine brush-holder may be made by fastening together two hearts, as in Fig. 36. Give the children several five-inch squares of cutting paper,

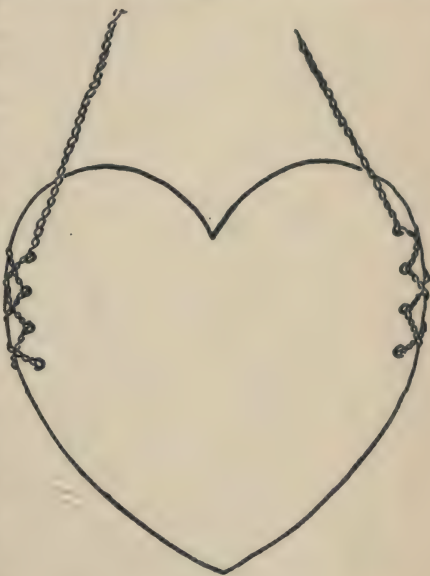
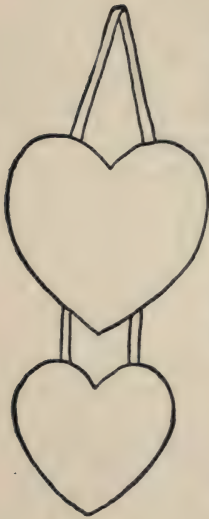


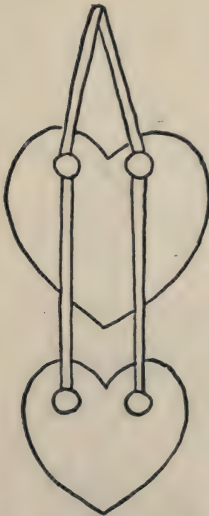
FIG. 36

which they will fold through the center and cut into heart shapes, practicing until a good pattern is secured. Use this pattern for cutting two hearts of stained tag board or colored Bristol board. Punch, lace and tie with cord twisted from raffia, as previously described. The tag board may be stained by brushing over with vegetable stains or Easy Dyes. Browns and greens will be the best colors.

Another valentine may be made by cutting two hearts of different sizes from white drawing paper, the children



UPPER SIDE



UNDER SIDE

FIG. 37

cutting their own patterns from soft paper. These may be decorated, then strung together on ribbons, as in Fig. 37. Birds in flight may be put on in gray, after tinting the hearts blue, like the sky. Evergreen branches are also effective on the tinted blue.

64. Easter Greetings. Give the children paper patterns like Fig. 38, the pattern to be not less than $3\frac{1}{2}$ inches long. Draw around the pattern on white drawing



FIG. 38

paper. Color the shells a pinkish tone, and color the chickens yellow. Print in pencil first, very lightly, then retrace with ink or brush and paint.

65. Kite. Cut and give each child two strips of heavy cardboard, one 1x16 inches, the other 1x8 inches, and cross the shorter one over the longer, four inches from the end of the latter. Fasten by tying, then cover with a piece of heavy paper 16x8 inches, folding over and pasting. Attach a

tail. The flying string should be attached at the crossing point of the strips. A tail may be made of two-inch sections of hollow grass or reed stems, on which are strung alternately two-inch circles of colored papers prepared by the children.

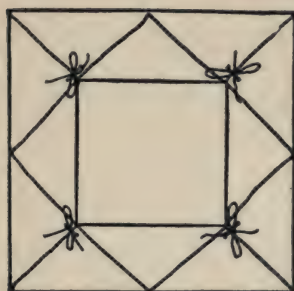
66. May Basket. A six-inch square of weaving from raffia may be made, introducing some colored raffia. This square may be sewed into a cornucopia and a braided loop attached. This would be strong enough to hold some earth, with a plant in bloom, like violets or spring beauties.

67. Book of Birds. This book may be made for the description and listing of birds seen during the migrating season. Make the leaves of writing paper and the cover of wall or construction paper, and sew as in previous books. Decorate simply.

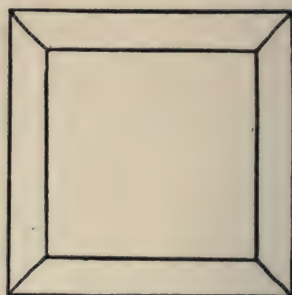
68. Additional Foldings. These additional foldings, see page 76, are designed for special needs in themselves, or to supplement other lessons. They may be made from six-inch squares.

(a) **THE HANDKERCHIEF CASE.** If this is desired as a gift, to hold handkerchiefs, a nine-inch square of construction paper will be needed to make it. Place the square with a corner toward you. Fold this front corner to the back corner, crease and unfold. Turn the square so that this crease will run from back to front. Fold the front corner to the back corner, crease, and unfold. Fold the front corner to the center, crease, and fold the corner back toward you to the middle of the crease, and crease. Repeat these folds and creases with the remaining three corners. Punch and tie as in A, Fig. 39, if desired.

(b) **PICTURE FRAME.** Fold a square into sixteen small squares. Fold one edge to the nearest crease, and crease. Fold the opposite edge the same, creasing firmly. Do not unfold these. Fold the other two edges in turn the same way, and crease. Fold the corners so that they will appear like B, Fig. 39. A picture may be placed inside this frame, and the corners of the frame pasted.



A



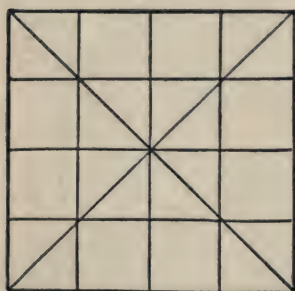
B



C



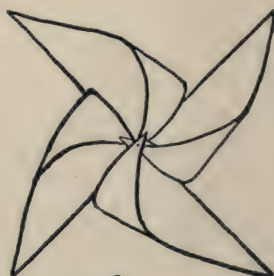
D



E



F



G

FIG. 39

(c) **THE BOAT.** Place a square with an edge toward you. Fold this edge to the back edge, and crease. Turn the paper so that the two open edges are at the right. Fold the nearer edge to the farther edge, and crease. Place the upper right corner, made up of four loose corners, toward you. Fold three of these to the back corner and crease. Turn this over. Fold the front corner to the back, and crease. So far this is like the soldier cap, Section 39. Open it like a cap, and fold the front and back corners of the cap together and crease, as in C, Fig. 39. Place this with the open corners at the top, as in 1 and 2 in C, and open the boat by drawing 1 and 2 apart. When opened as wide as possible, crease, as in D. Notice the corresponding points 1 and 2 in C and D.

(d) **THE BOX.** Fold as in E, Fig. 39. Lap the corners and turn up the sides, and paste, as in F.

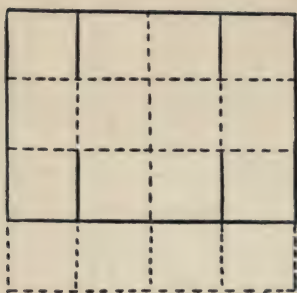
(e) **THE WINDMILL.** Fold and crease the diagonals in a square. Cut on each crease from the corner to within a half inch of the center. Then fold in the corners, as in G, Fig. 39, and run a pin through them into the end of a stick. Place this in the wind.

69. Doll's House. A doll's house, such as children will be much interested in, may be made in first, second or third grade, from boxes that are divided by a partition. The furniture attempted must not be too elaborate for low grade children to make, and may be made as simple as the pieces previously planned.

The following pieces of furniture are made from six-inch squares, folded into sixteen squares, as in A. The dotted lines show folds and unused edges, and the full lines show on what lines to cut.

(a) **THE SEAT.** Fold and cut as in A, Fig. 40. B is a three-inch square, to paste on the back of the seat when it is folded and pasted as in C.

(b) **THE BUREAU OR SIDEBORD.** Fold and cut like D, Fig. 40. Fold another square and cut as in E. Paste F from D, and paste E on the back and around the sides to complete F.



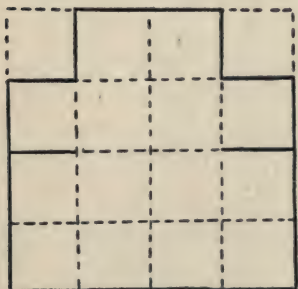
A



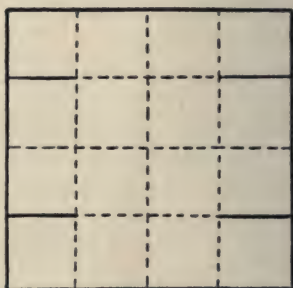
B



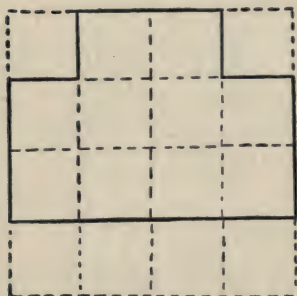
C



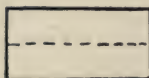
D



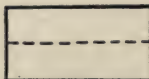
E



F



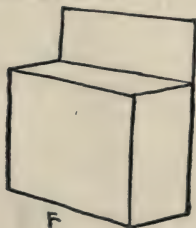
G



H



I



J



K

FIG. 40

(c) **THE STOVE.** Fold and cut as in G, Fig. 40. Paste for the body of the stove. Cut a three-inch square (I), and paste back of the body to make the vertical plane firmer. Cut two pieces $3 \times 1\frac{1}{2}$ inches, as in H, which fold through the center to make the shelf for the back of the stove and the hearth for the front. Complete as in J.

TEST QUESTIONS

1. Show how construction work aids in other branches, as number and language. Give a specific illustration.

2. If your program is crowded, how can you manage to have some construction work done without interfering with the other branches? Be specific in your answer.

3. Why should the making of articles go along with paper cutting?

4. Cut and send in for criticism a branch containing leaves and apples or pears, a horse and wagon with a man driving, and a boy climbing a ladder.

5. Take a piece of cloth at least 6 inches square, and illustrate on it the three kinds of stitches called for in Section 13. Make such illustration at least five inches long.

6. Make and send in to the school a penwiper (Section 14, f), a lantern (Section 15, a), and a six-pointed star (Section 15, d).

7. Fold the paper for the triangular box (Section 16). Do not tie the box, but send in the folded paper.

8. What danger must be guarded against in community work? What are some of the advantages of this kind of work?

9. Make drawings showing (a) how the paper should be folded and cut for the sled (Section 58); (b) the method of constructing the picture frame (Section 59).

10. What is the relation of construction work to drawing? Give a specific illustration showing how each of these branches helps the other.

CHAPTER THREE

DRAWING

INTRODUCTION

"The things a child can make
May crude and worthless be;
It is his impulse to create
Should gladden thee."

1. Aim of the Lessons. The aim of these lessons in drawing, painting, clay modeling and picture study is to assist in the development of the creative powers of the child; to enlarge his understanding and appreciation of the world of nature; to develop the power to see beauty in commonplace things; to acquaint him with the world of art as expressed in man's handiwork; to increase his respect for the workers of the world in all fields of labor, and to inculcate a desire to become a worker in some field of action, thereby enhancing his joy in living and in contributing to the joy of others. Finally, through a course in public school art it is hoped to improve the environment of the school and home and eventually to bring about a greater interest in civic beauty, thereby increasing the pleasure of living.

2. Arrangement of Plan. The plan outlines the work by months, covering the work of the first to the third grade, inclusive. Specific directions are given for each exercise, but the teacher, to make sure that she can give the lessons without hesitation, and that she can do rapidly and with skill what she asks the pupils to do, should practice the exercises herself as she studies the lesson. Draw every object the pupils are asked to draw; study every subject they are asked to paint, and make every article called for in connection with the lessons. If you have not had previous experience in this kind of work, you will need to give yourself a good deal of practice on some of the exercises before you can successfully present them to your pupils. This,

however, should not discourage you. The exercises are so simple, and the directions so complete, that you are sure to succeed, and in the development of the exercises you will add one more accomplishment to your preparation as a teacher.

At the end of the work outlined for each month there is a paragraph headed *Tests*. You should do the work called for in each test and send it to the School as you complete the work for each month.

3. Materials. The work, to be carried out most effectively, is dependent upon the selection and proper use of a number of nature and art materials. The nature materials will be considered under the outline for each week's work. The art materials consist of paper, pencils, crayons, outfit for water color work, rulers, paste, scissors and clay.

(a) **PAPER.** The paper used for work in drawing and painting is an inexpensive manila, cut any size, but usually sold in two sizes, 6x9 and 9x12 inches. Cream-tinted paper is preferred to white paper, as the white paper is not an agreeable tone for water color effects, and the use of the slightly cream-toned paper is much easier on the eyes; besides, it is very much less expensive. Colored paper for mounting, construction and cutting work should include a large range of colors, including red, orange, yellow, green, blue, violet, gray, brown and black.

A light weight of cardboard should be available for simple problems in cardboard modeling or construction work.

Large cardboard sheets, 22x28 inches, of neutral gray tone, for use in mounting school exhibits, should be included in a list of supplies.

(b) **PENCILS.** A soft pencil is necessary for use in free-hand drawing; SS grade is a very good one. Any of the standard pencil manufacturers make good pencils—Dixon, Eagle or Prang.

Care of Pencils. The pencil should be sharpened to a blunt point and rubbed down on paper to make the best point for drawing. The drawing pencils should not be

used for writing, but kept in cases made for the purpose, or kept by the children in their desks, in cases made for the purpose of holding all their art materials. If pencils are kept by the teacher, each pencil should be marked with the owner's name, and should always be used by the owner alone, for sanitary reasons.

(c) **CRAYONS.** Colored crayons have become almost as universal a medium as the pencil, and, in the absence of water color, a substitute for that medium. If but one medium could be obtained, a box of colored crayons would be recommended as the best medium to purchase. A box containing eight colors—red, orange, yellow, green, blue and violet, brown and black—is manufactured by several reliable firms whose addresses are given under the heading *Supplies and Supply Houses*, Section 4.

(d) **WATER COLORS.** The use of color in connection with art study is indispensable. Surrounded by a world of beauty in color, one can only inadequately express form without the use of color. The three-color box, containing red, yellow and blue, with black added, is the most acceptable box of water colors for school use. The colors may be purchased separately at three cents per cake. For prices of boxes, consult the catalogues of any of the firms named in Section 4.

(e) **BRUSHES.** A No. 3 sable brush, costing seven cents, has been found the most practical for general use in school work. A Japanese brush, costing five cents, for line work is very convenient, but the sable can be substituted.

(f) **WATER COLOR PAN.** This may be purchased at small expense. It is a small, black, japanned tin, with enamel lining. Tops of tin cans or fruit jars may be made to serve as substitutes.

(g) **GENERAL CARE OF MATERIALS.** Most of the materials needed in the art lessons can be cared for by the individual pupils by placing everything belonging to one child in his desk in a box; or, a cloth case may be made especially for this purpose. Materials furnished by the school, such as paper, should be passed out at each lesson.

4. Supplies and Supply Houses. The art materials enumerated, as well as many others, including drawing textbooks for pupils' use and teachers' manuals, may be obtained at the following supply houses: W. T. Gage & Co., 84 Spadina Ave., Toronto; Copp, Clark & Co., 64 Front Street, Toronto; The George M. Hendry Co., 215 Victoria Street, Toronto; or through the leading supply houses of the capital of your province. If you write to your own superintendent or inspector, he will advise you what materials to use and where to purchase them. It is best to buy good paint boxes, as they last a long time. You should buy water color paints in cakes to refill the boxes when they are empty.

SEPTEMBER ¹

The golden-rod is yellow;
The corn is turning brown;
The trees in apple orchards
With fruit are bending down.

The gentian's bluest fringes
Are curling in the sun;
In dusty pods the milkweed
Its hidden silk has spun.

The sedges flaunt their harvest
In every meadow nook,
And asters by the wayside
Make asters in the brook.

From dewy lanes at morning,
The grapes' sweet odors rise;
At noon the roads all flutter
With yellow butterflies.

By all these lovely tokens
September days are here,
With summer's best of weather,
And autumn's best of cheer.

HELEN HUNT JACKSON.

¹ See Volume One, page 68.

5. First Week. (a) **DECORATING THE SCHOOLROOM.** This beautiful poem enumerates some of the interesting nature subjects that will be available for use in the art lessons during the month. During the first days at school encourage the children to bring in some of the pretty grasses, weeds and flowers they may find on their way to school, or on their nature trips to some vacant lot or near-by woods. By all means, decorate the schoolroom with some of these trophies. Have some of the children bring from home earthen or glass fruit jars, in which to place the bouquets. Do not arrange several kinds of flowers together, but make a bouquet of one kind; sometimes two varieties will make a pleasing effect. Try to provide a bouquet of flowers or grasses for the teacher's desk while the autumn flowers last.

Cautions. (1) Avoid having bouquets of nature material around when they begin to show signs of decay.

(2) Great care should be shown in changing the water frequently; some of the grasses, weeds and seed pods collected do not need water, but may be allowed to dry, as they can be kept during the winter months.

(b) **LESSONS IN COLOR.** Conversational lessons on the colors found in the different flowers will prepare for lessons in expression later. The teacher should be provided with a color chart of the six colors, normal red, orange, yellow, green, blue and violet. These charts may be purchased or made of colored paper by the teacher. Arrange the colors in the order named. It is a good plan to write the color names on the blackboard, with the appropriate color crayon, and to draw a flower or fruit, or even a colored circle beside the word, to associate color impressions with the name of the color. The teacher should be provided with a glass prism, and she should allow the children to see the beautiful rainbow colors which a ray of sunlight produces.

Draw on the board a bow of the six colors to represent the rainbow. Ask the children if they know how the colors are arranged in the beautiful arch in the sky that sometimes

comes after the rain. The red is on the outer line, and the other colors follow in the order named above.

Read to the children the Indian legend in *Hiawatha* regarding the rainbow:

Saw the rainbow in the heaven,
In the eastern sky, the rainbow,
Whispered, "What is that, Nokomis?"
And the good Nokomis answered:
" 'Tis the heaven of flowers you see there;
All the wild-flowers of the forest,
All the lilies of the prairie,
When on earth they fade and perish,
Blossom in that heaven above us."

(c) **USE OF WATER COLORS.** Explain to the children, as scientifically as possible, why the bow of colors appears after the rain. There are three colors in the pigments we use, from which all the other colors are made. These three colors are red, yellow and blue. Have the children then take their boxes of water colors and make some of the colors they see in the rainbow.

Material. A box of water colors, a small pan half filled with water, a brush, a piece of soft cloth to clean the brush, and two pieces of manila paper 6x9 inches.

Method. Moisten the colors by touching them with the brush wet in the water. Ask the pupils what colors they see in the sky, and have them try to make a light blue in their boxes. Put a few brushfuls of water in one division of the cover of the box, which is to be a palette for making or mixing colors, and then rub lightly across the blue cake and mix this color in this water, making a light blue wash. Then put a light blue wash all over the paper, to represent the sky. Fill the brush full of the light blue color, commencing in the upper left corner and painting a strip across the top of the paper. Fill the brush again and continue a second strip below the first one; repeat this process until the paper is covered evenly. Continue the study, asking questions such as the following: "Would you like to make a color for the grass-covered ground? What color is it? How

shall we make green?" Direct the children to mix some yellow with the blue wash in the box, and watch it turn to green. If the wash is too light, add more blue. If it should become too dark, use more yellow and water.

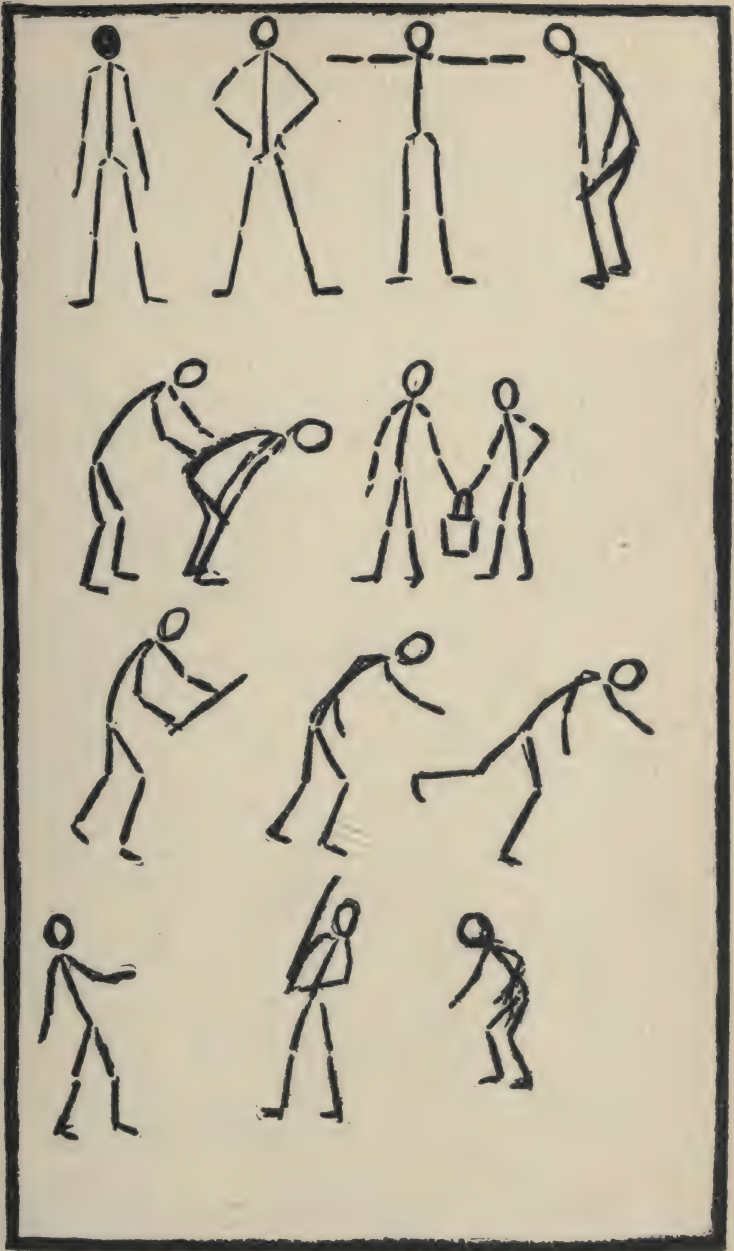
Commence to put the green wash on, to represent the ground at the lower edge of the paper, and with light sweeps of the brush filled with the green wash cover the lower part of the paper to represent the grass. Allow the children to divide the space as they choose, having more sky than ground space, or *vice versa*. An irregular division of the space is more pleasing than an even division. This will be sufficient for the first lesson, if the children have not used water colors before.

Follow this lesson with an attempt to represent the distant trees along the horizon line, with a darker green than the grass. Let the brush dance along the edge where the ground and sky meet, to show the mass of the woods in the distance.

This lesson may be varied by asking the children in the second grade to represent the clouds in the sky by leaving the paper bare in spaces where the clouds show.

In the third grade a sunset sky could be represented; or, a road or stream running through the meadow would vary the simple picture.

6. Second Week. (a) **FREE ILLUSTRATION.** To test the children's power to recall and represent some interesting scene, use as the subject for a free illustrative lesson, *What I Did During Vacation*. Interest the children by such questions as the following: "Were you on the river or lake in a boat? If so, can you make a picture of the boat? Was it a rowboat, a sail boat or a steamer? Did you fish or go wading, or dig in the sand? Draw a picture to show me what you used to play with or how you looked while playing. Perhaps you were on the farm and were having a good time feeding the chickens, gathering the eggs, playing on the hay stacks, or riding in the big wagon and helping to drive. Show me by a drawing some of the pleasant times you had?"



FIGURES EXPRESSED BY STRAIGHT LINES

If you were helping mother wash, iron, sweep, bake or care for the baby, you can make a picture of a little girl at work; or, if any of the boys were helping mother or father, tell me with your crayon just what you were doing. What fun to make a picture of ourselves, showing how we looked at work or at play!"

Material. Use manila paper, large size, 9x12 inches, and colored crayons, for the work in free illustration.

Method. After the children have expressed themselves as well as possible, tell them that you will help them in the next lesson to make a picture showing a little girl or boy playing.

(b) FIGURE DRAWING. *Material.* Manila paper and black crayon.

Method. Choose a little boy and ask him to come and stand perfectly upright, with arms close to the body. Direct the children to make one line on the paper to represent what the boy is doing—standing. Give them another name for the position—*vertical*, meaning upright—and explain that the line is said to be in a vertical position. Draw a line to represent the boy lying down, and explain that this is called a *horizontal* position. Show them how to represent the trunk with one straight line, the limbs, both upper and lower, with two lines each, and the head with a little circle. Draw on the blackboard to illustrate the standing figure, using skeleton lines, as shown in the illustration. Ask the little boy to run across the schoolroom. Call the attention of the children to the slanting position of the body and limbs, and represent this on the blackboard as shown in the illustration. Ask the children to illustrate, without help, a figure with arms extended; another figure with arms akimbo; another holding a bat; another holding a fish pole, etc. After the children can express action with the skeleton figure, show them how to fill in and clothe the figure. By using the side of the crayon they can make a silhouette figure, as shown in the illustration on page 89.

After several drawings have been made showing various positions of the boy in action, choose a little girl and pro-



FIGURE PAINTING
IN WATERCOLOR OR INK

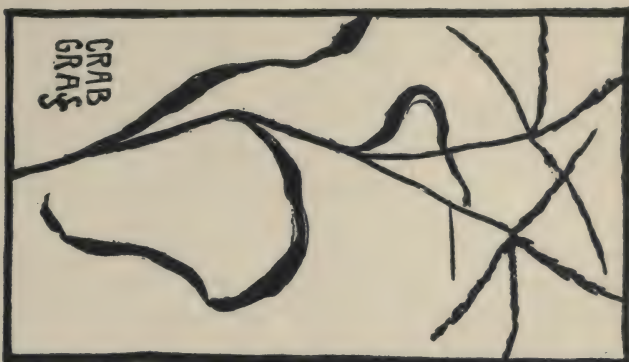
ceed in the same way, making the skeleton lines first, then adding the clothing. Imagine the little girl running, jumping a rope, rolling a hoop, etc. The colored crayons would be attractive to use in these studies, as they give opportunity to show the color of the dress or hat. Suggest using one other color with black, so that a medley of colors may not be used on one figure.

Continue figure drawing in the next lesson, illustrating on the blackboard for the children the addition of a landscape with the figure, to show an outdoor setting. Draw a horizon line and represent trees in the distance, as shown in the previous lesson. Colored crayons may be used, and the color of the sky, ground and trees may be massed in as in the water color study suggested.

7. Third Week. (a) **STUDY OF GRASSES.** Have the children give the names of some of the grasses gathered recently; as the foxtail, millet, squirrel-tail, barley, timothy, rye, oats, etc. Let them choose one and place it on a cardboard easel, standing the grass upright, just as it grows. Pin it in place against a long, narrow piece of paper, placed on the piece of cardboard bent to stand like an easel. First have the children fold the paper along the center, making a panel shape in which to draw the picture. Ask the children to draw a long line to represent the graceful stem, and call their attention to the delicacy of it. Have them add the grass head, or ear, as it is called, noticing how wide it is and how long, also how fuzzy the edge appears. Use the crayon, making strokes close together to represent the grass head. See illustration of grasses. After two or three grasses have been drawn on paper, let some of the children try drawing on the blackboard, others making memory drawings on paper at their seats.

• (b) **MEMORY DRAWINGS.** Memory drawings for seat work make very valuable lessons.

8. Fourth Week. (a) **FLOWER PAINTING.** *Material.* Secure a large, simple flower, such as the sunflower, field lily, cosmos, clematis, aster or golden-rod; the flower may



CRAB
GRASS



DOCK



FOX-TAIL

GRASS STUDIES IN PENCIL, CRAYON OR BRUSH WORK

be chosen with reference to the children's power of execution. A water color outfit and manila paper will be needed for this work.

Method. Have a conversation lesson first, always, to impress the color and form of the flower, stems and leaves upon the child's mind. Children form impressions quickly and very often express these impressions without referring again to the object.

The teacher should make a picture before the children that they may acquire good habits of work. Place your paper where all the pupils may see you work. Show them how you moisten the color you wish to use, how to take the moist color from the cake, or how to mix the colors slightly in the palette, if the color to be used is not a primary color. The sunflower and field lily will be made by mixing a little red with the yellow, as will also the golden-rod, while the clematis and aster may have a little blue and red mixed together to match the color. Paint the flower, putting on the lightest or brightest color first; for instance, in the sunflower or cosmos put in the petals before the centers. After painting the flower, paint in the stem and leaves, and show the shape, size and arrangement of the leaves. Paint in mass, working from the center out to the edge, and try to paint the leaf with one stroke of the brush. If this is not possible, add one stroke beside another until the size and shape of the leaf are secured. To obtain the right tone of green, try adding a touch of red with the yellow and blue to make it less brilliant and grayer in tone.

Caution. Do not outline the form with either pencil or brush and fill in, but paint in directly.

Continue flower painting, using the nasturtium, red flowering sage, or other garden flower, in the second and third grades, if the children have had work along this line in previous years. The children will enjoy trying the same flower many times, until they can do the work easily.

(b) MEMORY LESSONS. A lesson without the object is one of the most valuable means for impressing the form and color on the child's mind.

(c) EXHIBITS. It is hoped that the teacher has provided some means whereby an exhibit of the children's work may be placed before them. Occasionally a whole class lesson should be exhibited, and criticisms should be made, in which the children may express their opinions of the work.

A string fastened about five inches above the chalk trough, crossing the board, would be one means of holding the drawings in place when a class exhibition is being made. A wall space covered with burlap makes a most desirable background against which the drawings may be pinned.

A permanent exhibit could be mounted on the gray cards and fastened together with twine, through holes punched equally distant from the corners. The row of mounts could then be suspended from the picture moulding.

There is nothing that so stimulates the interest of the children as to see their work in comparison with that of their classmates. Besides this, some good examples of drawings and paintings which the teacher makes could be mounted and placed where the children's eyes may occasionally rest upon them and unconsciously absorb as valuable lessons as those obtained during the class period. The lessons gained during this period of the child's development are largely through imitation, hence the value of having good examples of work always before the children.

Test. Illustrate the figure in various actions by drawing the skeleton lines which represent it.

Make from nature two studies of grasses in silhouette, using black water colors or ink.

Write a brief outline of work done in drawing during September.

OCTOBER

One mass of sunshine glows the beech;
Great oaks, in scarlet drapery, reach
Across the crimson blackberry vine
Toward purple ash and sombre pine.

The orange tinted sassafras
With quaintest foliage strews the grass;
Witch-hazel shakes her gold curls out
'Mid the red maple's flying rout.

Our forest that so lately stood
Like any green, familiar wood,
Aladdin's fabulous tale repeat;
The trees drop jewels at our feet.

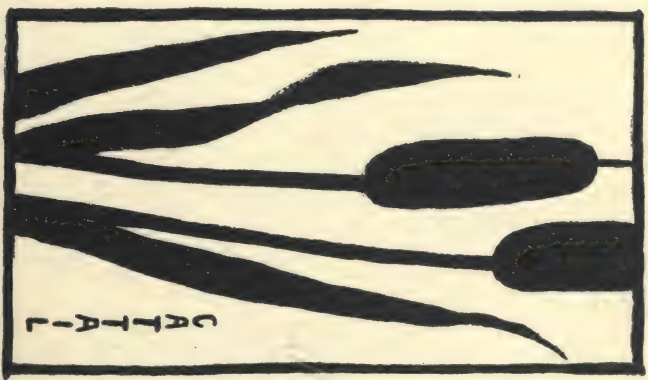
With every day some splendor strange;
With every hour some subtle change
Of our plain world; how could we guess
Such miracles of loveliness.

LUCY LARCOM.

9. Nature Walks. During your nature walks in the beautiful month of October, call the children's attention to the wonderful changes going on in the colors in the foliage. Ask them to tell what is the color scheme of the maple, oak, sassafras and willow; which trees assume the autumn coloring first; which tree is called the "king of colonists"; which trees drop their leaves early, and which hold them late.

Besides collecting the various leaves, study also the seed pods, nature's treasure caskets. The milkweed, jimson or Jamestown weed, Indian mallow, cat-tail and teasel will make beautiful winter bouquets, besides furnishing interesting material for nature and art study. The fruits, and nuts, too, serve as rich harvests to the nature and art lover, as they do to the farmer.

10. First Week. (a) **AUTUMN WEEDS.** Choose one of the pretty weeds, milkweed with seed pods, or teasel, and study it carefully. Introduce the study in this manner: "What kinds of seeds has this plant? Some seeds are provided with wings to help them fly and scatter about; some have stickers that fasten themselves to clothing; others merely drop from the pods to the ground below. Which kind has the milkweed? the teasel? the Indian mallow? Study the shape and color of the pod and how it attaches it-



STUDIES OF SEED PODS, IN WATER COLOR OR INK

self to the stem. Do you think you could show with your crayon the color and form of the branch studied?"

Place a branch where all may obtain a good view, and after questions concerning the size of the stem, arrangement of the leaves or pods, whether growing opposite, alternate, singly or in clusters, let the children draw with crayon a picture of the branch.

Continue the study of seed branches during the week, and vary the lessons by using different materials or a different medium, as, for instance, a lesson in water color work could follow a lesson in colored crayon. A silhouette study in black water color or ink would make a pleasing variety. See the illustration.

(b) SEAT WORK. Freehand cutting of the seed pods would be a very valuable review lesson of the form side of the study, as the scissors is a very necessary tool to learn to use.

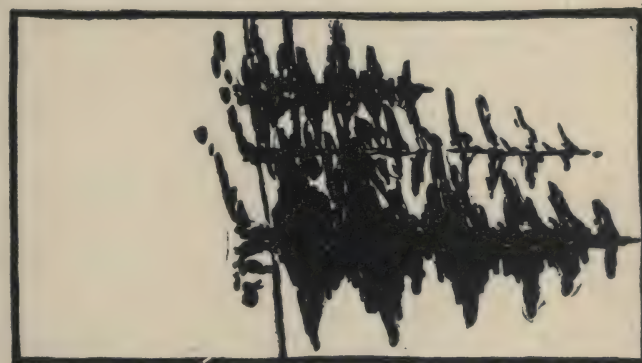
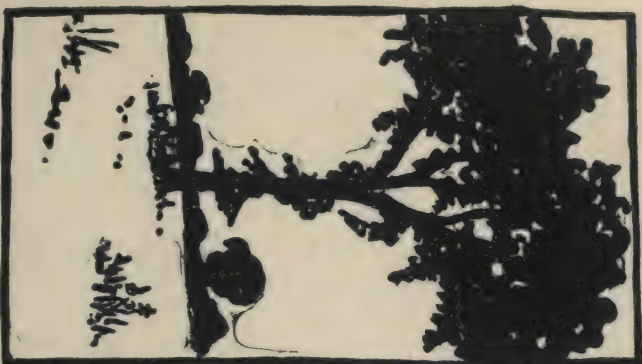
11. Second Week. (a) AUTUMN LEAVES. Choose some of the pretty, gayly colored leaves, and make a collection, pressing and mounting the different varieties. Urge the children to strive for the largest collection possible, then bind them together and make little booklets of the leaves. While the children in the first grade press and mount specimens, the second grade could paint their collection, using the single leaf, and the third grade could make a study of two leaves on a branch. See Color Plate, Maple Leaves.

In the first grade the leaves may be traced around, in the first studies, and then painted with water colors; the children in the second and third grades can paint the leaves without tracing or outlining, painting them in mass, dropping in the bright colors as the color of the leaf suggests. If the single leaf is used, let each child be provided with one on his desk; but if a small branch is used, the teacher should pin the studies on the pasteboard easels and place them where the pupils may easily see them.

A good device for placing such small studies is to have thin, light-weight boards placed between the front desks in



PLATE ONE



TREE STUDIES, IN WATER COLOR OR INK

every other aisle and half way back in the row, so that children in the back seats may see the studies equally well. This allows every other aisle free for the teacher to pass back and forth to give individual criticisms.

Make as many leaf studies as you can during the week. The water color or colored crayons will be the best mediums to use.

(b) **BOOK COVER.** Tell the children that they may now plan a cover for the leaf booklets. Use the brown or gray paper for a cover. It is difficult to obtain colored paper, so use some of the heavy wrapping paper which may be obtained at the stores. Use a leaf form for a unit, and make a border across the book cover. The leaf units may be cut out and pasted in a row to form a border, making a good first grade problem; or, after a unit has been cut it may be traced on the cover to make a border arrangement, and painted in a flat color or in black, making a silhouette effect. Border lines above and below the units should always be added to complete the border effect. See the illustration, page 113.

12. Third Week. (a) **TREES.** When the trees are the gayest in color is the time to try to express the October landscape. Choose some tree, one that you have had an opportunity to study and enjoy, and after the children have observed the color scheme, the laws of growth in branching, etc., ask them to try to make a picture of this tree in water color. If it is the maple tree, and the yellow and orange colors predominate, mass in with a brushful of color the general effect of the foliage with the lighter color (yellow), and then drop in the red to make the orange hues; or perhaps some leaves are still green; if so, paint the green by taking the colors fresh from the cakes and allow them to blend on the picture instead of mixing the colors in the box. This gives the fresh effect that one is apt to lose if the colors are mixed together too much. If the oak is chosen, then the rich browns may be obtained by mixing all these colors—red, yellow and blue—together, and if the brown has a reddish tinge, use more red than yellow and blue.



PLATE TWO

Cautions. (1) Do not use black under any circumstances to make a color darker, for it makes the color dull and muddy. By using more of the blue and red you can darken any color.

(2) Do not use much water where the color required is very dark, as in the trunks of the trees.

(b) LANDSCAPES. After a lesson on the separate tree on yellow paper, continue the October landscape by painting the sky a blue and the ground a brown, to suggest the brown grasses or fallen leaves. After the sky and ground are nearly dry, paint the large tree in the foreground of the picture. See illustration. Proceed in the same manner as you did in representing the tree alone on the dry paper.

The woods in mass, represented in the distance, would be a good review, following the suggestion given for painting a landscape in September.

(c) ILLUSTRATING A POEM. Read to the children a few lines of poetry descriptive of the October landscape, and let them represent it as they recall seeing the woods. Following is an appropriate stanza:

Now, like Aladdin of the days of old,
October robes the weeds in purple gowns;
He sprinkles all the sterile fields with gold,
And all the rustic trees wear royal crowns.

The straggling fences all are interlaced
With pink and purple morning-glory blooms;
The starry asters glorify the waste,
While grasses stand on guard with pikes and plumes.

13. Fourth Week. (a) FRUITS. Choose some of the fall fruits for representation—the pumpkin for the first grade, the apple or pear on the branch for the second and third grades. If the pumpkin is chosen, the teacher can weave around it the Hallowe'en sports and games. After painting it in water color, working in mass and representing the deep creases in its surface by using a little blue with the red and yellow colors to make a shadow color, the children would enjoy cutting the pumpkin to represent the jack-o'-

lantern. Then a lesson might follow where the picture is represented with the grotesque features of a face.

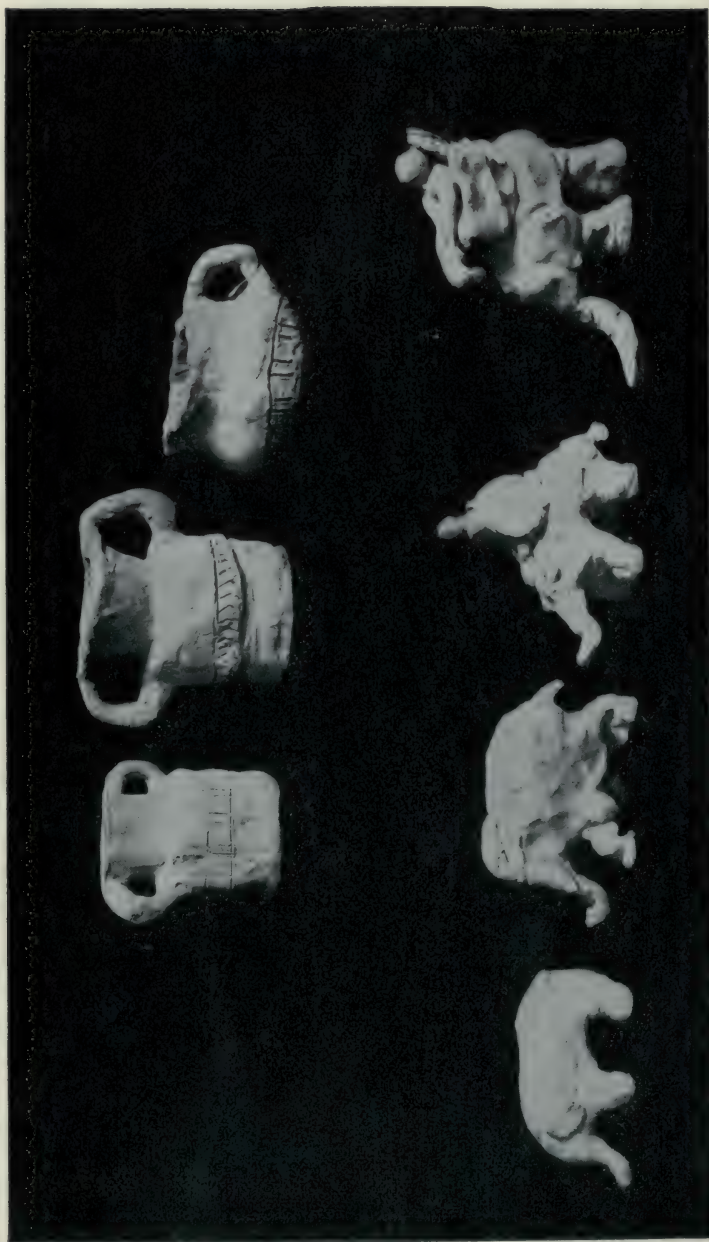
Use the large size paper, and make large paintings. These may be cut out and a row of jack-o'lanterns may be fastened at the edge of the board. You can represent some of these faces as being mirthful by making the up-turned lines in the features, and the opposite effect by drawing the lines downward.

(b) MODELING. A lesson in clay modeling would be very appropriate in connection with the study of the pumpkin, apple or pear. After the clay has been softened to the consistency of putty, by placing in a bag immersed in water, let the children each take a piece about the size of a two-inch ball, and try to form the object they are studying. Model it with a little tablet underneath, so that the object will have a base and will not roll about without a proper setting. See halftone illustrations opposite.

If the fruit on the branch is chosen for a lesson, the first work might be done in gray tones to get the form of the study, using black water color and water. Following this, make a study of the object in full colors, leaving a high light of light blue, if the surface of the fruit is shiny.

In modeling the fruit, the apple or pear may be modeled in the full round, or in relief against a clay tablet, showing the branch and a couple of leaves in low relief.

Too much cannot be said in favor of the use of clay in representing objects in the three dimensions, as no other medium compares with this one as a means of expression. After a little practice in preparing the clay, the teacher will not find it troublesome; after it has once been softened it can be placed in an earthenware jar and kept moist for some time. After the lesson some of the specimens may be saved, and the remainder should be pressed together to form a cake, and then pounded together to make a smooth mass. The janitors are usually willing to assist the teacher in the first preparation of the clay, which consists of pounding the lumps small and soaking in a coarse bag for a day or two.



Photograph from Western State Normal School, Kalamazoo, Mich.

CLAY MODELING

Then suspend the bag and allow the water to drain off. After rolling the clay into a cake and placing it in a dry cloth, it will be ready for use. Use a string to cut the clay in small pieces for class work. Place a piece of paper under the clay on the desk. Do not roll the clay in the hands, but press it into shape with the thumb and fingers. No other tools are necessary for this work.¹

Read to the children the first stanza of the poem which follows; the teacher will appreciate the second stanza:

I took a piece of plastic clay
And idly fashioned it one day;
And as my fingers pressed it, still
It moved and yielded to my will.
I came again when days were past;
The bit of clay was hard at last;
The form I gave it still it bore,
But I could change that form no more.

I took a piece of living clay
And gently formed it day by day,
And moulded, with my power and art
A young child's soft and yielding heart.
I came again, when years were gone—
It was a man I looked upon.
He still that early impress bore,
And I could change it nevermore.

Test. Make a study from nature of a seed pod on the branch, using colored crayons.

Paint a simple October landscape representing a maple tree, or an oak tree, doing the work from nature.

Write a brief outline of work done in drawing during October.

NOVEMBER

November woods are bare and still;
November days are clear and bright;
Each noon burns up the morning chill;
The morning's snow is gone by night;

¹ If near a brick, tile or pottery works, ground clay can be obtained at slight cost. In almost every section of the country will be found banks of clay suitable for this work.

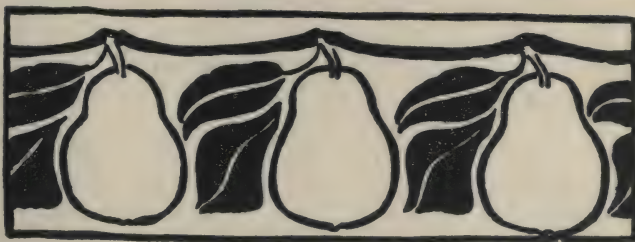
Each day my steps grow slow, grow light,
As through the woods I reverent creep
Watching all things lie "down to sleep".

HELEN HUNT JACKSON.

14. Preparatory Work. The interests of November center around the preparations made for winter, both by man and the lower animals. The children will be interested to tell you of the household stores in fruits and fuel that the kind and thoughtful mother and father are storing away. The farm products are loaded into wagons and brought into the city, or stored in the granaries for future use. How dependent all are on the farmers' successful harvest! How grateful we should be for his services in providing us with our daily food. Ask the children if they have ever lived in the country or visited on the farm when the harvest was being gathered. Ask them to name the fruits, vegetables and grains that come from the farm. Have them name the varieties of potatoes, squash, beets, parsnips, onions, carrots, turnips, etc., also varieties of apples, pears, peaches, and the grains—corn, wheat, rye, barley and oats—also the nuts—hickory, walnut, butternut, chestnut, beechnuts. Suggest a nutting party for a day's outing in the woods some Saturday. Many trophies could be brought back to use in beautifying the schoolroom and also afford interesting subject-matter for nature study, art study and composition work. To describe and illustrate some incidents of a nutting party would vitalize both the oral and written work, and would awaken the perceptions of even the dullest pupil. Try it.

Have the children describe the preparations the animals make for winter—the squirrel, gopher, hare, field mouse, bear, etc., also the insect world. Let the children collect and bring to school the largest possible variety of nature's fruits.

15. First Week. (a) **FRUITS AND VEGETABLES.** Suggest to the children that they make pictures of some of the fruits and vegetables that are most attractive in form and color. The Hubbard and the crook-necked squash, the turnip,



STUDY OF FRUIT BRANCH, IN BLACK WATER COLOR OR INK—DESIGN
FROM FRUIT BRANCH

beet and onion, all make attractive studies. Draw in crayon, or paint in silhouette or in full color. See illustrations. The large variety of subjects makes it possible to choose different ones for each grade. The larger ones are best suited to the lowest grades. Place them on a chair, which may be placed on the teacher's desk, in plain view of all pupils. If the smaller vegetables are chosen, place them on boards between the front desks.

(b) **CUTTING AND MODELING.** Freehand cutting, or tearing the paper to represent the rough surface of the squash, would make good seat work. If the sand table is used to carry out the idea of the farm activities, the barns, wagons and wheelbarrow could be folded from bogus or wrapping paper, or thin wood could be used and the children given the opportunity to use the saw, hammer and tacks to fasten the parts together. Clay could be used to fashion the animals of the farm—horses, cows, sheep, pigs—or the children could bring their toys from home. This problem may occupy the greater part of the month, the children being happy to work at the sand table before and after school hours.

16. Second Week. (a) **OUTDOOR STUDIES.** Compare the general aspect of the outdoor world this month with gayly-robed October. Ask the children if they can recognize the trees after the leaves are gone. Call to mind the general features of the landscape by such questions as the following: "Have you noticed the beautiful effects of the bare trees against the sunset skies? What colors are in the sky at sunset time? Could you paint some bright skies during one lesson and the next lesson add the bare trees with your black crayon?"

Choose different trees in the different grades. Try representing the frisky squirrel on a tree branch, or at the base of the trees. Make a large picture of the squirrel with its bushy tail. See illustration, page 141.

(b) **ILLUSTRATE READING LESSONS.** Continue free illustrations of the stories brought out in the reading lesson or morning talks.



THE STORY
OF LITTLE
AGDONACK
AS TOLD BY
A CHILD IN
THE FIRST
GRADE

ILLUSTRATING
THE USE OF
FREE HAND
CUTTING
MATERIALS
BLACK PAPER
AND SCISSORS

17. Third Week. SPECIAL EVENTS. Illustrate stories connected with the boyhood of Hiawatha, also stories connected with the first Thanksgiving. Make a wigwam of sticks and skins, and decorate it with Indian symbols. If possible, let the children make the Indian shirt and decorate it with symbols or picture writing, using crayola or water colors. They can also make the Indian headdress and will enjoy the work.

If the first grade has chosen the working out of farm life on the sand table, the second grade could develop Indian life, and the third grade might take up colonial life and build the first log house and make Priscilla caps and kerchiefs to wear at the Thanksgiving festival. Let the work be in preparation for the national holiday, and try to cultivate the true spirit of Thanksgiving.

18. Fourth Week. PREPARATION FOR THANKSGIVING.

In the chill November,
Like a sunbeam bright,
Comes the glad Thanksgiving
Full of joy's own light.

Now at home's dear fireside,
Many a loving band
Meets in joy together
In this happy land.

And though we rejoicing
Taste Thanksgiving cheer,
'Tis the happy home-love
Makes the time so dear.

LAURA FROST ARMITAGE.

Lead the children in conversation to tell how they will spend Thanksgiving. Can you not plan to let the children cook something and prepare a dish for a school party? The first grade could prepare cranberry sauce; the second grade could bake beans, while the third could prepare the pumpkin for pies. If it is not possible to work this out in the school-



THE HOME OF HIAWATHA =
"BY THE SHORES OF GITCHE GUMEE"

APPROPRIATE FOR BLACKBOARD OR IN CHARCOAL

C-II-9

room, you can give careful directions and the work may be done at home. Arrange for each one to contribute something for the school party. The long table used in kindergarten work could be utilized, or boards placed on boxes will serve the purpose. In what way may the art lessons serve to increase the pleasure and general attractiveness of the occasion? Paper napkins may be decorated with pictures of asters or other fall flowers, turkeys and pumpkins. If the party is not too large, place cards may be hand-painted and some appropriate decoration may be added; or pumpkins may be cut from paper painted, and the name printed on the face of the round card. If the parents are invited, invitations simply printed by the children, with some added sketch appropriate to Thanksgiving, would be practical. A row of pumpkins in colored crayon, and a few words like the following would be appropriate for the invitation: "Please come to our party." The lessons in table setting and all the points in table etiquette will be some of the most practical art problems imaginable.

The teacher should have the blackboard work suggestive of the interesting pictures associated with Thanksgiving Day—a drawing of the *Mayflower*, a group of vegetables, or a large shock of corn would be attractive. The set of Thanksgiving pictures made by Lucy Fitch Perkins and sold by the Prang Educational Company, Chicago, also the Thanksgiving packet offered by the Davis Press, Worcester, Mass., are helpful. These pictures may be had for a nominal sum. Small reproductions of the pictures by George Henry Boughton, representing the Puritans, Priscilla, John Alden, etc., would be interesting to the children who are studying colonial times.

Test. Make a study from nature of a vegetable, in crayon or water colors.

Draw a bare tree from nature, using pencil or crayon.

Make a suitable illustration for blackboard work, suggestive of Thanksgiving.

Write a brief outline of work done during November.



FREHAND PAPER CUTTING—THE STORY OF THE THREE BEARS

DECEMBER

December, oh, December dear,
 We know your laughing face,
 And who that jolly fellow is
 That drives at such a pace.

The prancing steed, the jingling bells,
 The sleigh with toys heaped high,
 Proclaim to every child on earth
 That dear St. Nick is nigh.

LIZBETH B. CUMMINS.

19. Nature and Picture Study. Let the art work of December be influenced by the aspects of nature, by the winter games that interest children, by the stories, songs and poems especially suitable for December, and last, but not least, by the natural inclination the children have to celebrate the well-nigh universal holiday of Christmas by the making of some pretty gift for parent or classmate. Collect pictures illustrating the winter landscape and figures of children in winter sports. Some of the great world-renowned pictures of the Christ child should become familiar to the children. The following are suggested as being especially enjoyed by the children in lower grades:

The Madonna of the Chair.—Raphael.

Madonna of the Rabbit.—Titian.

Holy Family.—Van Dyck.

Holy Family.—Murillo.

Arrival of the Shepherds.—LeRolle.

The Sistine Madonna.—Raphael.

St. Anthony and the Christ Child.—Murillo.

Christ with the Doctors.—Hofmann.

20. First Week. WINTER SPORTS. Recall the pleasures of the Thanksgiving holiday, and ask the children to draw something to illustrate the good time they enjoyed. To make the work definite, ask a few questions such as the following: "Did you go sliding down hill? Did you go skating? Did you play snow-ball? Can you make a picture to show what you did?" Use crayons and have them represent the



CONVENTIONALIZED UNITS, TO DECORATE OBJECTS MADE BY PUPILS

color of the sky, the bare trees and the children at play. Leave the ground white to represent the snow. Ask one of the children to bring his sled to school the next day, so that one of the children may pose with the sled.

After the pupils have tried to express the picture from memory, then follow with a second lesson, using the sled and the child posing. If the children have some difficulty in representing the sled, have a lesson to show them how to represent the runners and the top fore-shortened. The pose could vary in different grades. In the first grade the little boy or girl may be pulling the sled, while in the second grade the boy or girl might be lying or sitting on the sled, in the position he or she likes to ride best; and in the third grade the girl might be sitting on the sled and the boy pulling.

Use manila paper, 9x12 inches, and crayons, in the first and second grades, while water colors representing figures in silhouette might be used in the third grade.

After the pose lesson has been given, the next lesson could be a memory lesson from the pose lesson, and to give a new feature the winter landscape could be added. Call attention to the white ground, the bare trees and the beautiful effects of ice, snow and frost.

Read from Whittier's *Snowbound* such parts as the children enjoy.

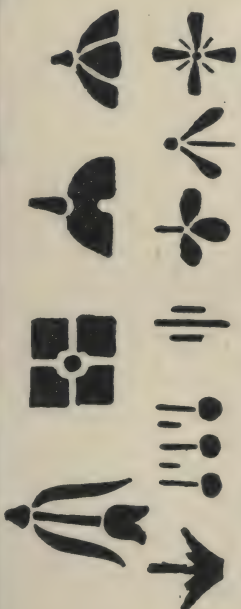
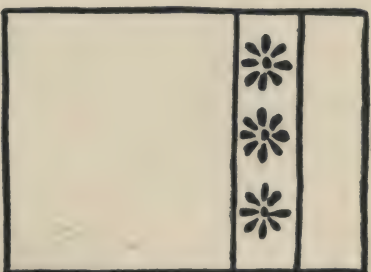
21. Second Week. WINTER LANDSCAPE. Make a special study of the sunset effects in the winter landscape, also the evergreen trees. Paint a bright, pretty sky and represent the dark green evergreen tree on the hillside. Use manila paper and water colors or crayons.

Let the children illustrate the following lines:

I remember, I remember, the fir trees
dark and high;

I used to think their slender tops were
close against the sky.

The branches of the pine tree are very effective decoration at this time of year; they also serve admirably for an art



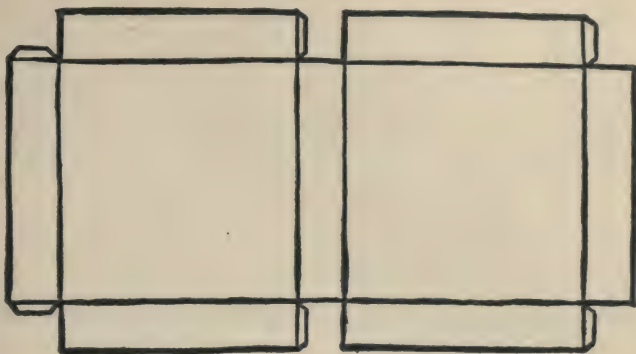
PATTERN OF PORTFOLIO, WITH SUGGESTED UNITS FOR A DESIGN

study. Let the children paint a wash to represent a bright-colored sky, and after that wash has dried perfectly let them use either black or green crayon and represent the long, slender needles of the pine. The evergreen tree and the cones make good units of design, and cuttings may be made to be used later to decorate the Christmas gifts.

22. Third Week. PREPARATIONS FOR CHRISTMAS. The art work this week should be correlated as closely as possible with the construction work. If Christmas boxes, calendars, picture frames, blotters, etc., are to be used as gifts, the art lessons should be directed to making designs suitable for these objects. The snowflakes make beautiful units that may be used in design work. Fold the paper and cut to suggest the beautiful geometric units. The evergreen tree conventionalized, the holly leaves and berries and the poinsettia are all seasonable subjects for designs. See illustration of *Design Units*, pages 111 and 113, also *Construction Work*, page 49.

One of the most acceptable gifts the child can make to the parent is a portfolio containing the school work the child has done during the term. To make the portfolio, choose some heavy, colored paper, brown, gray or green, and fold it in the center, to make a cover in which the work may be fastened. Fold the edges in, to make the portfolio more firm. If a portfolio is desired large enough for papers 9x12 inches, use paper 11x24 inches, allowing one inch to fold in on each side.

Let the children cut a unit of design from paper, and in the first grade these units may be pasted to form a design on the portfolio. In the second and third grades the unit may be traced around and painted with color in harmony with the paper. At Christmas the use of red and green in combination is permissible, and the holly and poinsettia make good units for design. The design should be conventional, and even in the lower grades the children may be taught to know that *pictures* are not suitable to use as decorations, when applied to constructed objects.



PATTERN AND DESIGNS FOR SQUARE BOX

Make some suitable blackboard drawings for Christmas; a Christmas tree full of gifts, Santa Claus in a sleigh with reindeer, a fireplace with stockings hanging, would be much enjoyed by the children. Print the words *Merry Christmas* or some other appropriate sentiment.

Test. Illustrate a winter scene with a figure of a child with a sled. Use crayons.

Draw a design to show an appropriate decoration for a Christmas gift made by your pupils.

Write a brief outline of work done during December.

JANUARY

Who comes dancing over the snow,
His soft little feet all bare and rosy?
Open the door, though the wild winds blow.
Take the child in and make him cosy,
Take him in and hold him dear;
He is the wonderful glad New Year.

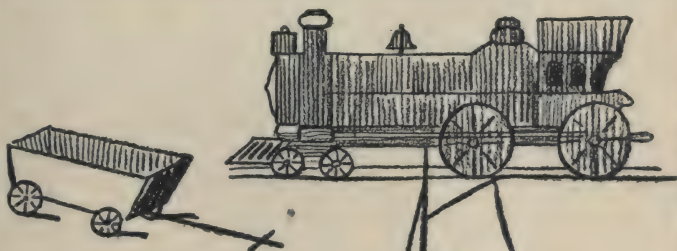
DINAH M. MULOCK.

23. First Week. Toys. After the Christmas holidays the children will be eager to tell you about all the good things Santa Claus brought them. Let them illustrate freely, to show you some of their Christmas gifts. Ask the children to bring some of their toys to school to enjoy with the other children, and to use as objects for drawing.

It would be interesting to study how and where our toys are made. The Germans are the great makers of toys. A craftsman's guild near Chicago is also doing some very interesting work in making simple and substantial toys.

Select some of the simplest toys for the first grade. The toy animals are very good; the bear, dog, horse, cat or elephant would make good studies for silhouette work. These studies would be interesting subjects for freehand cutting and clay modeling. In the second and third grades more difficult toys might be used as studies, suited to the power of the children to represent them. The toy engine and train of cars, the carts and horses, are all interesting material. A

CHRISTMAS TOYS BRING CHILDREN'S JOYS



box of tools would serve admirably, and especially so when in the hands of the children suggesting their use. For example, let a boy demonstrate the proper positions of the workman in using the saw, the hammer, the plane, etc.

24. Second Week. (a) **OBJECT DRAWING.** Ask the children to bring a toy drum for use in illustrating the principle of the foreshortened circle. Hold the drum so that the children can see across the top, and ask them if it appears round, like a circle, or narrow, as an ellipse. Give a drill in drawing ellipses. Draw appearance of the drum when the top is a little below the level of the eye and appears like an ellipse. Then place the drum so that it is above the level of the eye and ask what face comes into view. The children should see the bottom face, and should note that this face, as the drum is held, looks like an ellipse. Have the children draw the drum as it appears a little above the level of the eye. Hold the drum as the drummer carries it in the band, and ask the children how it appears. Draw it as it appears when held in this position. See illustrations.

If the children should be familiar with the drum, choose something else that will demonstrate the same cylindrical principle, namely, that when the circle is seen obliquely, it appears to be an ellipse. The toy tub or pail will serve the same purpose. Draw in outline. The work from the objects could be varied by having a child pose, using the different objects. Poses of the boy with the drum, or girl washing, using the tub, will delight the children. See illustrations.

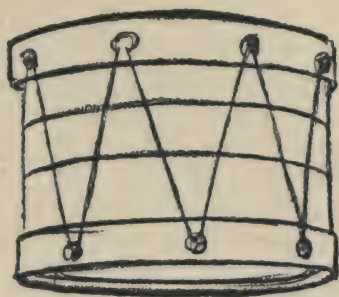
(b) **THE PENCIL.** In these exercises the lead pencil, a very soft medium, should be introduced. Previous to this the crayons, black and colored, should be used, as they respond more easily to the touch. The pencil can be introduced earlier, if the children have developed some power of expression. On the other hand, if their muscles are still weak, the soft crayon should be continued.

25. Third Week. **OBJECT DRAWING (CONTINUED).** (i) *Soap-bubbles.* Continue object drawing. The first grade children should be given a drill in drawing circles. This can

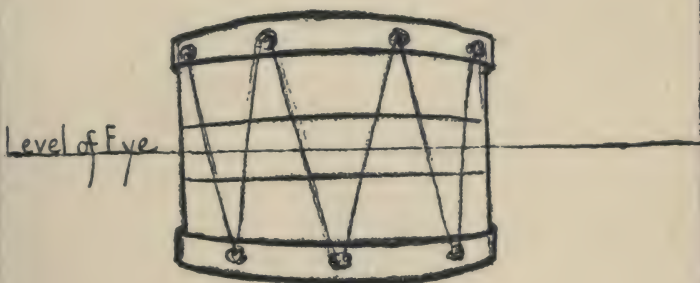


⑥

PLATE FIVE



Above Level of Eye



On Level of Eye



Below Level of Eye

be introduced by having a soap-bubble party, in which the children will see the perfect form and beautiful colors. Ask the children if they would like to try to represent the different sized bubbles or spheres. Have them draw with their pencils or crayons on the blackboard to represent the bubbles. Draw a circle. Show the children how to draw the circle by holding the pencil pointing to the left, and commencing at the bottom of the circle, moving around to the left, top, right and bottom. After a lesson in drawing, have a painting lesson to represent the bubbles.

Method. Moisten the water colors. Take a brushful of water, and, starting in the center, represent the circle by water only. Then touch the colors lightly, and touching the wet circle, drop in the delicate colors to represent the iridescent colors of the soap bubble.

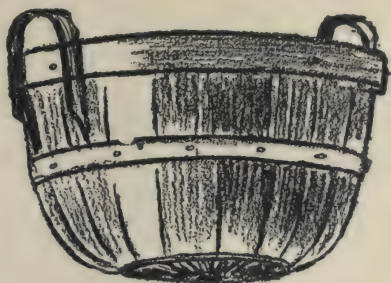
(2) *Lanterns.* The second and third grades could study the beautiful form and colors of Japanese lanterns. These will form attractive decorations in the schoolroom, hung in a corner or in the window, fastened to the window cord. The form of the lantern will review the sphere, or ovoid, and the black bands are cylindrical. When hung above the level of the eye, how do the bands appear? Can you see into the top or the bottom of the cylinder? Have the children show in their drawings what they see. They may use the colored crayons to show the pretty, bright colored lantern and the black bands. The plain colored lantern will be the simplest and best to use. After a lesson using the colored crayons, try using the water colors.

Method. If the lantern is plain color, paint the shape of the body of the lantern, and then use all three colors mixed to make black. In representing the bands, paint them a tiny space away from the body, which may be still wet.

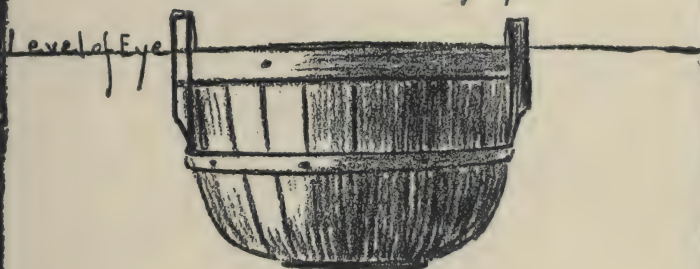
26. Fourth Week. OBJECT DRAWING (CONTINUED). Continue object drawing, and vary the program in the first grade by some illustrative drawing of stories or nursery rhymes. In choosing objects, select those that will be attractive to the children. A little set of dishes that the



PLATE FOUR



Above. Level of Eye



On Level of Eye



Below Level of Eye

girls could bring from home would be interesting. A lesson on how to set the table, and also how dishes are made, would be very instructive.

After a lesson on drawing the appearance of cups and bowls, in the first grade, and cup and saucer, or teapot, in the second and third grades, a final lesson could be given in representing a tea party. Let some of the children pose at the table, and after studying the simple lines of table and chair and sitting figure, ask the children to draw what they see, or what they can remember.

Clay modeling would be a very valuable form of study of the dishes. A bowl would be the easiest form to model. The cup with a handle might be attempted in the third grade. Do not attempt plates, as they are apt to be too thin and break too easily. See halftone illustration of clay vases made by children in the third grade.

Test. Make a drawing from some children's toys.

Make three drawings from some cylindrical object (not a drum) to illustrate the appearance of cylindrical objects in different positions.

Write the principle governing the appearance of cylindrical objects.

Write brief outlines of work in drawing done in January.

FEBRUARY

'Tis splendid to live so grandly
That long after you are gone,
The things you did are remembered,
And recounted under the sun;
To live so bravely and purely
That a nation stops on its way,
And once a year, with banner and drum,
Keeps its thoughts of your natal day.

27. Preparation for Special Days. The month of February is rich in anniversaries which suggest many interesting things along the line of literature and art. The events of greatest interest to the children will be St. Valentine's Day

BIRTH-
PLACE OF
CHARLES
DICKENS



PORTSMOUTH
ENGLAND
FEBRUARY
7, 1812.



LINCOLN'S BIRTHPLACE
HARDIN CO. KENTUCKY
FEBRUARY 12, 1809.



STUDIES OF FAMILIAR OBJECTS IN SILHOUETTE EFFECTS
C-II-10

and the birthday anniversaries of Abraham Lincoln, Charles Dickens and Henry W. Longfellow. Show any pictures you have of these men, and of any of the characters described by Dickens. Read some stories or poems, or extracts from writings or speeches on their birthdays.

Continue the drawing from objects during this month, and since the illustrations connected with Dickens and Lincoln include the drawing of their early homes the problem of drawing houses and other rectangular objects may very appropriately be taken up.

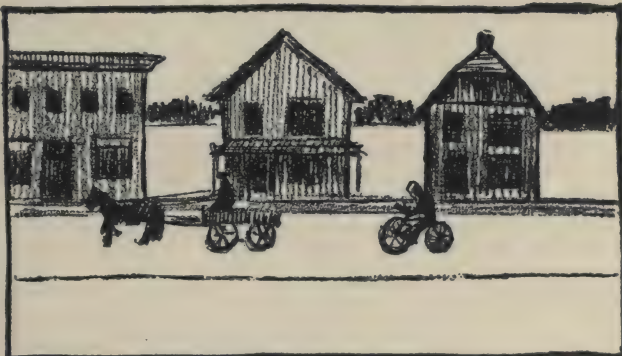
The objects in the room, such as flower pots with growing plants, a table, a chair, a bench, a stove, a globe, an ink-bottle, etc. may be drawn from the object and from memory. For Dickens' birthday, February 7th, a geranium in flower should be brought to school if none is growing in the school. The red geranium was the favorite flower of Charles Dickens. The children might be allowed to draw his second favorite, the yellow pansy, and color it with crayons or water colors. The teacher should, if possible, show a colored picture of a yellow pansy. Such pictures are often found in seed catalogues. Teachers will do well to keep seed catalogues in their rooms, for they will often be useful as illustrations and in suggesting the correct shape and color of flowers.

Some of the child stories of Dickens or the short poems of Longfellow should be read and the children asked to draw pictures to illustrate them. Each child should be asked to illustrate the part he chooses for himself. In addition to the new work for the month it is wise in February and in early March to review the work in simple design, showing how to make beautiful borders by repetition of units of form or by alternation of forms, and how to fill squares and oblongs with symmetrical designs by the application of the law of harmony between opposite parts. These designs may be in colors.

28. First Week. RECEDING LINES. Illustrate on the blackboard the appearance of the receding lines in the landscape as they are noticed in the road, railroad, telegraph poles and houses.



I



II



III

RECEDING LINES AND OBJECTS IN PERSPECTIVE

Method. First draw a long horizon line, then indicate the lines in a road directly in front of the observer, allowing them to meet at a point on the horizon; this point is called the *vanishing point*. Indicate also how trees are represented at different distances, diminishing in apparent size as they are more distant. Allow the pupils to follow by drawing with pencils and paper.

After a lesson on the general features of the landscape, make a drawing of the house. The first drawing may consist of a front or side elevation of the house, a drawing which gives the facts of the form; that is, proportionate height and length, the shape of the roof, and arrangement of windows and door. Such drawings may be made to represent the street, with its group of houses, stores and other buildings. Let the children try to make memory drawings from the streets with which they are familiar. After the children can represent the front elevation of the house, showing good proportion, then it will be well to introduce the house in perspective. See illustration, page 125.

29. Second Week. (a) **PERSPECTIVE.** Call the attention of the pupils to the appearance of the house when both side and front, or any two faces, are visible. Notice that one side may look very narrow from left to right, or *foreshortened*, as we say, and that the roof also appears narrower, according to our position in relation to the house. Let the teacher illustrate these points by drawing a house on the blackboard in angular perspective; that is, at such an angle to the observer that two faces are visible.

Draw the vertical corner that appears nearest to the observer, then place the remaining vertical corners, being careful to notice how far away they appear from the first vertical. Then draw the lines that represent the receding edges at the base of the house, letting them slant slightly upward toward the horizon from the corner nearest to the observer. All the lines in the roof will slant downward toward the horizon, being above the horizon line.

(b) *Lincoln's Birthplace.* After the children can draw a simple house in perspective, give them a picture of the old log house so familiar as the birthplace of Lincoln, located in Hardin County, Kentucky. The children would enjoy collecting sticks and making a log house similar to this one, and the pupils in third grade could also plan the old-fashioned stick chimney. After the house is built, the children may represent the house, working from the small model.

The free illustrations might include representations of some of the stories connected with the early life of Lincoln.

(c) VALENTINES. The second week's work will of course include the making of valentines, in honor of the good old St. Valentine, who, it is said, went about doing good to people unawares.

The freehand cutting and painting of hearts, with a simple love token printed neatly, would serve the purpose; or more elaborate ones may be planned which might be decorated with a flower border. Violets would be most appropriate for such a border.

30. Third and Fourth Weeks. (a) THE CANADIAN FLAG. At some time during the year every child should make the Union Jack. A correct picture is found in nearly every series of Canadian reading books. If there is none in any of your school books get your school board to write to the Methodist Book Company, Richmond St., West Toronto, and procure a copy of an excellent book about the Union Jack. This book gives the history of the flag and tells the correct method of constructing it. Every school in Canada should have a copy of this book. It will not always do to buy a small Union Jack for the pupils to copy, because very often the flags sold in stores are not correct in their form and in the arrangement of the parts of the flag.

The teacher should show separately in colored sketches on the blackboard the St. George's Cross, a red cross rectangular on a white ground; the St. Andrew's Cross, a white cross diagonally on a blue background; and the Irish Cross, a diagonal red cross on a white background. Having shown

the crosses of England, Scotland and Ireland separately, the teacher should point to the different parts of the Union Jack and ask the pupils to tell from which of the three crosses each part of the flag comes.

The teacher should carefully lead the pupils to see that the red Irish Cross does not run straight from corner to corner of the flag. It should be lower on the half of the flag next to the flag pole, because when Ireland was united to England and Scotland, the Scotch people insisted that next to the flag pole, the longer part of the white Scotch Cross should be above the Irish Cross. On the other half of the flag the Irish Cross is nearer the top of the Scotch Cross. All correctly made Union Jacks show this arrangement very clearly. Many times even in the British Empire the Union Jack may be seen hanging upside down. Pupils should be trained to hang their own flag properly.

Children in the kindergartens and primary grades may cut out the parts of the Union Jack and paste them on a white background to make the flag. Other classes should color the flag with crayons or water colors. The Canadian Flag consists of the Union Jack on the corner of a red flag, with the arms of the Dominion on the field. The pupils should be trained to know the arms of their own province, and of the dominion. A good picture of the arms of the dominion should be in every school. The flag will make a most appropriate subject for drawing, the third and fourth weeks of February.

In addition to the teaching of the flag, the last two weeks should be partly devoted to illustrating the stories of Dickens, the poems of Longfellow, and early scenes in the life of Lincoln. If the teacher chooses wisely she may get many stories and poems that will make pictures in the imaginations of the children, which they will enjoy trying to put on paper. The teacher must not be over severe in her criticisms.

Test. Make a drawing to show the appearance of rectangular objects—house or box.

Write the principle of rectangular perspective.

Make a drawing to illustrate an appropriate blackboard sketch for this month.

Write brief outline of work in drawing during February.

MARCH

The Spring is near, I know it well
Though cold air wraps the town;
Though on the hill and in the dale
The shivering trees are brown.

Though birds are hiding still afar,
Though oak leaves rustle dry;
Though frost is on the pasture bar,
She's near! I'll tell you why:

A sunbeam gave a merry sign;
"Just follow me," he said;
His dancing eyes shone into mine;
I lifted up my head;

I looked across a vale of snow,
And there in hoods of gray
The pussy willows whispered low,
"The spring's not far away."

LYDIA AVERY COONLEY.

32. The Month of Awakening. The month of March suggests many activities, relating both to work and play, that may be turned to account for lessons in art.

March is the month of the awakening in nature, and the children will be interested to find the first buds on tree and shrub. The animal world, too, is especially interesting at this season, and if the children are studying any phase of animal life, it will afford good material for art study. The pet rabbit, cat or dog could be brought into the schoolroom for special study.

33. First Week. (a) ILLUSTRATED POEMS. Let the children dramatize or act out in play the work of the week, as this little rhyme suggests:

On Monday when the day is fair,
I wash my dolly's clothes;
On Tuesday I can iron them
Although it rains or snows;
On Wednesday I go out to play,
I take my dolly too;
On Thursday I receive my friends,
I've nothing else to do;
Then Friday is the time to clean
And set all things to rights;
On Saturday my doll and I
Walk out and see the sights.

Ask the children to bring a toy tub, washboard and iron, a doll and doll carriage. Different children may be called upon to act out the different scenes. After the part has been dramatized, ask the children to make a memory drawing for each day. Let the work cover the lessons for the week, and use different mediums for the representation. The crayon will be the simplest medium, and the illustration of children's work will suggest the treatment.¹

The third grade might try an outline drawing and painting of the same in water colors, as suggested in the colored illustration. See Color Plate section.

(b) PAPER CUTTING. Freehand cutting of the various utensils used in the week's work would suggest such things as a bench, tub, pail, iron, broom or sweeper. These cuttings may be mounted on black paper, which may be secured from a picture framer. It is the inexpensive black paper that is pasted at the back of pictures, and sells for a few cents per yard.

34. Second Week. BIRDS AND BRANCHES. Ask the children if they have been collecting the budding tree branches. The pussy willows, lilacs, horse chestnut and poplar all make interesting and beautiful studies. Place the branches for the children to draw from as you did in the fall, by pinning

¹ The teacher may be interested to know that the children in the third grade in the Training School, Western State Normal School, Kalamazoo, Mich., made the wash bench and the clothes horse that are pictured.



MONDAY



TUESDAY



FRIDAY

ILLUSTRATING THE WEEK'S WORK, BY CHILDREN POSING

them on the pasteboard easels and placing them on boards across the desks.

Illustrate freely, by blackboard drawing, the soft, furry pussy willows. White crayon on black paper is also very effective, as well as the black crayon on manila paper. The horse chestnut buds, with the tender yellow-green leaflets and dark, waxy bud scales, are very beautiful represented in water colors.

35. Third Week. STUDIES IN FIGURES. The children will be playing the spring games, marbles, jumping rope, and baseball, about this time. The teacher will take advantage of the natural inclinations of the children to make interesting subjects for art study. Ask the children to choose some game, and let some few children be called upon to act out the game for the rest of the school to study. The silhouette would be the easiest way to express these figures suggesting action, but the skeleton lines should precede, showing position of the body and limbs. In playing ball, let one boy act out the work of the pitcher, another the catcher, a third the one at bat.

Caution. Let the game be played without the ball, as it might end disastrously to have the ball struck in the school-room.

36. Fourth Week. (a) OUTDOOR STUDIES. The March winds suggest many picturesque situations. The flying of kites is very good, as is also the children running for their hats, their clothes and hair being tossed about by the wind. The March landscape, with smoke blowing from the chimneys, the clothes blown on the line, are all typical of the month of March. Ask the children to illustrate what the winds do, and after a conversational lesson let them choose some phase of the picture and represent it in their own way.

If crayon is used, the picture may be commenced by drawing first the horizon line, then drawing the house, trees or children flying kites, or whatever the theme may be. If water color is used, proceed according to the method indicated in the fall, applying first a water wash, then with color



PLATE SIX



FIGURE PAINTING IN SILHOUETTE—CHILDREN'S WORK

or black, to indicate the tone of sky, ground and figures. The figures should not be added until the background color is nearly, if not quite dry.

(b) PICTURE STUDY. The pictures painted by Millet, the great French peasant painter, should be studied at this time. The children will learn much about how to treat a figure in a simple manner, by studying and even attempting to copy *The Sower, Feeding the Hens, Churning, Shepherdess Knitting, Peasant Grafting a Tree* and *First Steps*. Millet has shown us, as perhaps no other artist, the beauty in everyday life. Millet was a peasant, born amid the hardships of the poorer class, and he spent a life of toil in the effort to make popular the subjects which he had chosen to immortalize. Although his work was not appreciated during his lifetime, he has since been hailed as the Poet Painter of the Peasant. We are all his debtors in helping us to see and appreciate more the work of those who toil. Let these pictures by Millet be given a place of honor in every schoolroom, for "A good picture is a silent teacher."

Test. Illustrate by figure drawing from a child posing, some work of the week as the rhyme suggests. Use crayons.

Make a study of some budding tree branches.

Write a brief outline of work done during March.

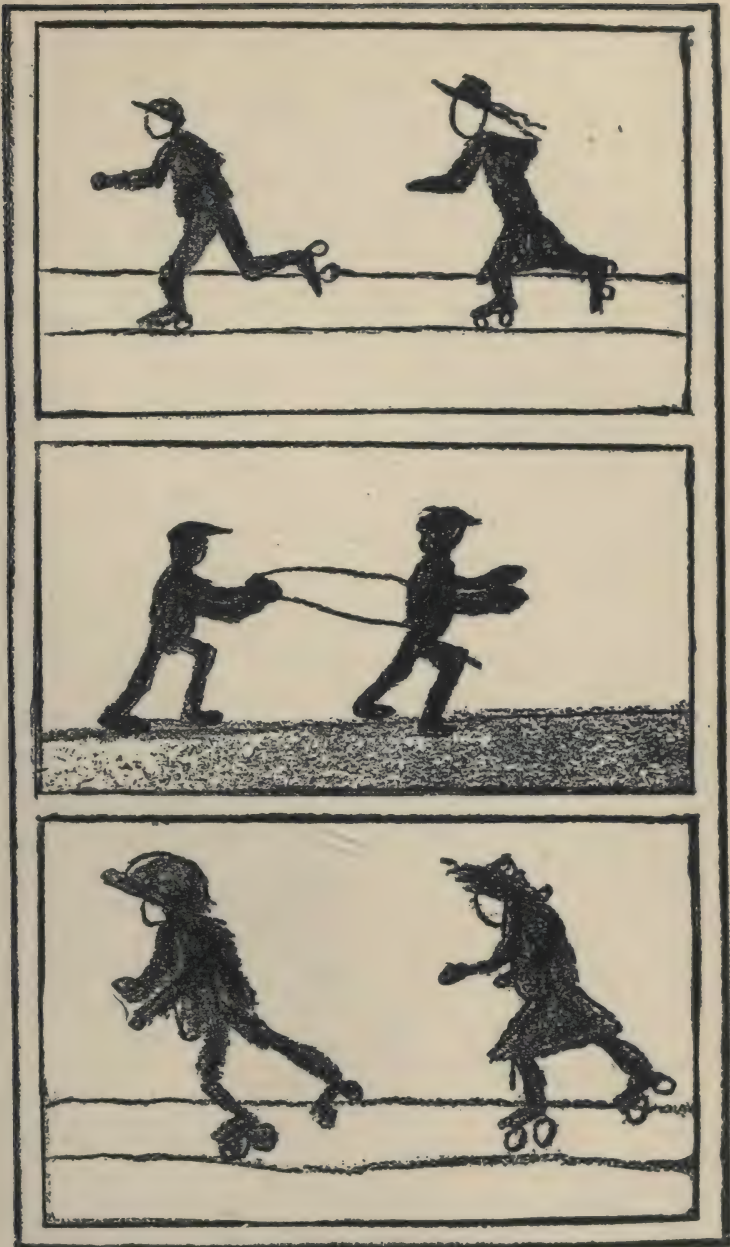
APRIL

The alder by the river
Shakes out her powdery curls;
The willow buds in silver
For little boys and girls.

The little birds fly over,
And oh, how sweet they sing!
To tell the happy children
That once again 'tis spring.

CELIA THAXTER.

37. Springtime. To enumerate the joys of life in the spring is to suggest abundant material for art study. The return of the birds, the new growth of the buds, the first



ILLUSTRATING CHILDREN'S GAMES—CHILDREN'S WORK

flowers, the delicate spring landscape, the animal life, and spring gardening are all fruitful sources for observation and expression. Ask if the children have been keeping a record of the return of the birds during the month. Find out if they have seen a robin, a blue jay, a bluebird or a flicker, and if they have helped to feed the birds and helped to build their nests by putting out some string and hair for them. It is of assistance to have bird pictures in the schoolroom. Those published by the Nature Study Publishing Co., Chicago, are good and inexpensive. Let the children copy some of the easiest ones; the crow, the robin, bluebird and blue jay are comparatively easy.

38. First Week. (a) *A Study in Birds.* Encourage the children to try to represent some of our bird friends. The crow or blackbird would be an easy one to commence with. Notice the form of the bird's body. It is very much like an egg in shape. Make this egg shape first, and then add the head, tail, wings and legs. Notice the position of the legs—how far back they are placed. Notice, also, the number and position of the toes.

(b) **BIRD BOOKLET.** Let the children try cutting the form of a bird. Use the bird cuttings to make a design for a bird booklet. Fold the paper to make a cover for the bird composition and pictures you have been making. Use a bird cutting and trace around the unit, and arrange the tracings to look well—two arranged symmetrically, or in a row across the top of the cover. Paint the units a flat color that will be in harmony with the color of the cover paper.

The children should know that the picture of a bird is not suitable decoration for a cover, and the bird unit, in silhouette, painted in flat colors, well arranged in the space, becomes a true decoration.

39. Second Week. **GARDEN SCENES.** This is the time of year that gardens are made. Interest the children in representing the subject by such questions as follow: "Who has a garden at home? Can we make a school garden? Who can bring a spade, a rake, a shovel, and a hoe for use in gard-



SPRING BUDS AND FLOWERS; DESIGNS FOR SPRING BOOKLETS

ening? What shall we plant in our school garden? Can we have both flowers and vegetables? Whose pictures do we think of in connection with gardening and farming? Have you a picture of Millet's *Potato Planting*, or *Going to Work* or *The Man with the Hoe*? Do you think you could represent some of the scenes from your gardening?"

Let a boy pose as if he were spading, or raking, and represent the figure with the proper action. The children in the first grade would enjoy cutting the pictures of the utensils and mounting the cuttings on dark paper.

40. Third Week. SPRING LANDSCAPE. The wonderful changes going on in nature will be very marked; "the green grass comes creeping everywhere," the trees are putting on their dresses of yellow-green, the streams are flowing, and the beauty of the spring landscape is upon the world. Represent the spring landscape in water colors. Show the children some of the spring landscapes made famous by the great French artist, Camille Corot. His pictures, *The Dancing Nymphs*, *The Children Dancing a Round*, *The Lake*, *The Willows* and many others reveal the delicate beauty of the springtime as few artists have expressed it. The willow was his favorite tree, and the early morning of spring was his chosen time for work. His groups of trees are considered some of the most masterful effects ever portrayed on canvas. The work of Corot is a great contrast to that of Millet, although the two artists worked in the same little village and were great friends.

41. Fourth Week. (a) SPRING FLOWERS. The spring flowers are probably in abundance at this time, and the tulip, daffodil and fleur de lis are in the gardens, while the wild flowers include the hepatica, anemone, wake robin, Jack-in-the-pulpit and others. Choose the large simple ones rather than the small ones, and let the children paint the tulip, fleur de lis or Jack-in-the-pulpit.

Place the flower in position, so that the children may study its form and color. Use the water colors and paint the flower in the free brush method, without outlining. After

"ULYSSES PLOWING"—FREEHAND CUTTING BY PUPIL IN FIRST GRADE



the flower is painted, express the stem and leaves in proper color. See the color plate illustration of tulip in color.

(b) **MAY BASKETS.** Great interest will be shown this week in collecting the spring flowers and making a May basket to leave at some friend's door on the eve of May day. Let the children plan a design in delicate colors on the May basket, using some of the spring flowers in a conventional way, as the illustrations suggest.

Test. Make a design appropriate for the cover of a bird booklet. Use ink or black water colors.

Paint a spring flower in water colors.

Write a sketch of a story which would be a suitable subject for free illustration.

Write a brief outline of work done during April.

MAY

May shall make the world anew;
Golden sun and silver dew,
Money minted in the sky
Shall the earth's new garments buy.
May shall make the orchards bloom;
And the blossoms' fine perfume
Shall set all the honey-bees
Murmuring among the trees.
May shall make the bud appear
Like a jewel, crystal clear,
'Mid the leaves upon the limb,
Where the robin lilts his hymn.
May shall make the wild flowers tell
Where the shining snowflakes fell;
Just as though each snowflake's heart
By some secret, magic art,
Were transmuted to a flower.
Is there such another, pray,
Wonder-making month as May?

FRANK DEMPSTER SHERMAN.

42. Animal Life. Are we all partakers of this "wonder-making month of May?" If necessary, a part of the time devoted to art should be given to the study and enjoyment



PLATE SEVEN



"O! busy squirrel with shining eye"



Our pet guinea pigs



This rabbit spent the winter in our school

of this "making of the world anew." What joy to find the first spring blossoms, to hear the song of the birds as they flit from one lacy tree top to another! To watch the life in the brooks, the water bugs, fishes, frogs and frogs' eggs, and the new life on the farm, the little chickens, rabbits, pigs, lambs and calves—all these are of great interest to the children. Let us collect pictures of animals and learn something of the life and works of the great animal painters. Rosa Bonheur was one of the most successful animal painters. Do you know her pictures the *Horse Fair*, *The Return from the Fair*, *Brittany Cattle*, *Oxen Ploughing*, *Flock of Sheep*, *On the Alert*? These represent some of the best animal pictures ever painted. Edwin Landseer, the English artist, was especially successful in representing dogs. His pictures, *Dignity and Impudence*, *A Member of the Humane Society*, *The Spaniels*, his own portrait with two favorite dogs, called *The Connoisseur*, and also his picture of the blacksmith shop called *Shoeing the Bay Mare*, are among the best known of his works.

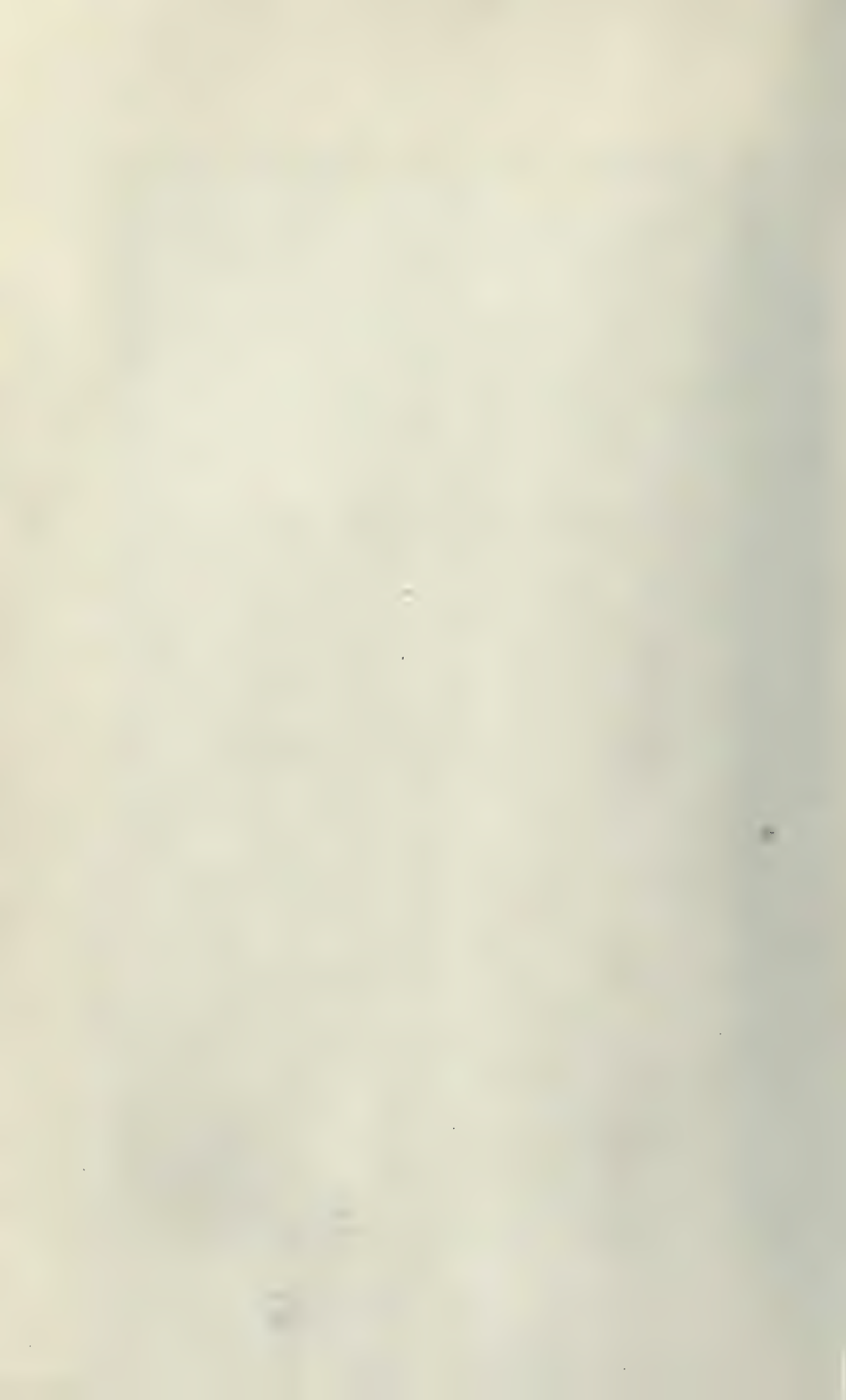
43. First Week. (a) STUDY OF ANIMALS. Ask the children to bring some of their pets to school, such as rabbits, chickens, or a gentle dog or cat. Let the children have a chance to see the animals for some time before an attempt is made to represent them. Call their attention to the form of the body. Is it long or short? How are the legs attached, and what is the shape of the head, ears, etc.? After the children have answered these questions, ask them if they would like to represent the animal as a shadow picture, using black paint or water colors. It will be easier for the pupil to begin with the form of the body and add the head and limbs.

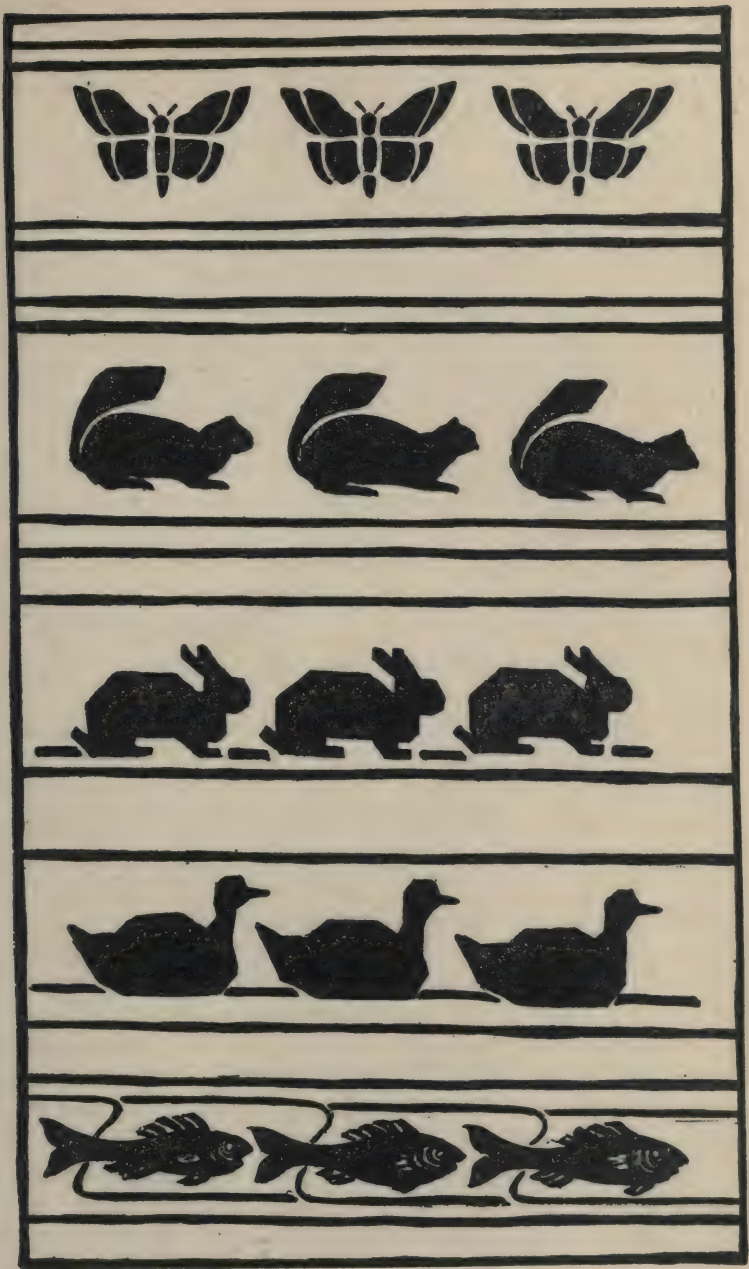
(b) DESIGNS. After a lesson on making the animal form in silhouette, try using it as a unit of design for a composition cover. Make a cutting of the animal form which you can use as a pattern, and trace around it, making a border design. See illustration. The animal can be used also in a design which may be worked out on a book bag, working in cross stitch.



LEAVING THE HILLS

From the painting by Farquharson





CONVENTIONALIZED DESIGNS

Clay modeling may be utilized as a fine medium to express the animal forms.

44. Second Week. STAINED GLASS EFFECTS. What gorgeous colors in the spring flowers! Lead the children to see that the daffodil, buttercup, dandelion and sunflower are the yellow ones, and that the orange flowers are the tulip and nasturtium; the red flowers are the geranium, carnation and some tulips. Ask the children which flower is green. (The Jack-in-the-pulpit.) Which are blue? (The forget-me-not, the blue-bells, bachelor buttons, love-in-the-mist.) Which ones are violet? (The violet, thistle, fleur de lis and clematis.) Ask them also such questions as the following: "Where have you seen all these beautiful colors besides in the rainbow and the ray of light through a prism? Did you ever see them in the church windows? Let us make some stained glass effects."

Method. Wash the paper over with a water wash, and then touch the colors in fresh from the cakes, and let them blend together on the wet surface. You may make some of the windows to represent the colors in the tulip, bright red, orange and yellow, with some green like the leaves added, or like the fleur de lis, with violet and green blended together.

The first grade could cut out a quarterfoil of black and paste over the colored paper to represent the black leaded lines. The second grade could cut a simple Gothic shape like the church window, while the third grade could cut the Gothic shape with a circle in the upper part. If you have no black paper, the manila paper may be colored black.

45. Third and Fourth Weeks. ARTICLES FOR THE HOME. Open the lesson with a few questions, such as those following: "How would you like to make something very pretty to take home for your mamma? What shall it be? We want to make something all ourselves." The first grade could make and decorate a holder; the second grade, a little mat; and the third grade, a top for a pillow. The material may be of burlap or denim; either would be good and inexpensive for use in this construction work. The iron-holder is square, and therefore you must make a design and cut a pattern from a



PLATE EIGHT



CLOVER



JACK-IN-THE
PULPIT



DANDELION

SPRING FLOWERS, IN WATER COLOR OR INK WORK

square paper. The rosette, cut by folding the paper three times, would make a good form. It may be cut with straight or curved lines.

The conventionalized leaf or flower would make an appropriate decoration for the mat or pillow. Cut the pattern or stencil of paper, and then trace around it and paint it with your water colors, or color it with crayola crayons, which is a waxy medium, and rubs off easily on the cloth. The wax crayon is made permanent by pressing on reverse side with a hot iron. Do not use colors too bright and crude, but make them gray by using a little of all three colors in any color you use. The dull greens and browns are the most appropriate colors.

The design may be carried out on squared paper, and then the cross stitch used on the fabric. If the cross stitch is chosen, a coarse canvas in which the threads can be easily counted should be used.

Third grade children can often lend their services in ornamenting curtains or other draperies for the schoolroom. On a large object let each child work one unit in the design.

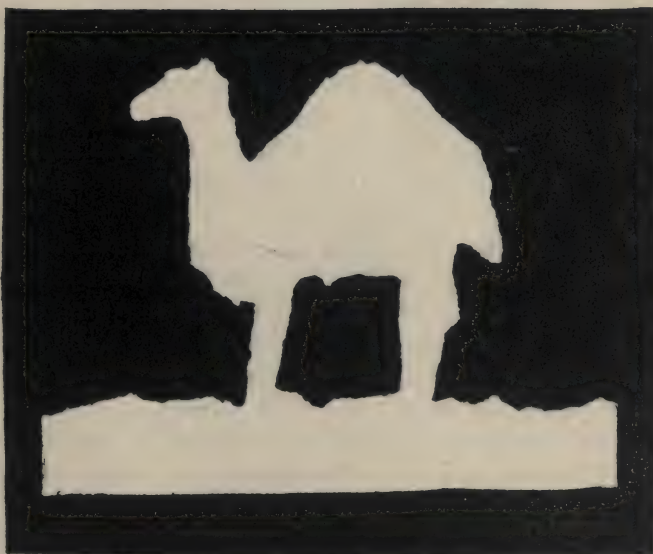
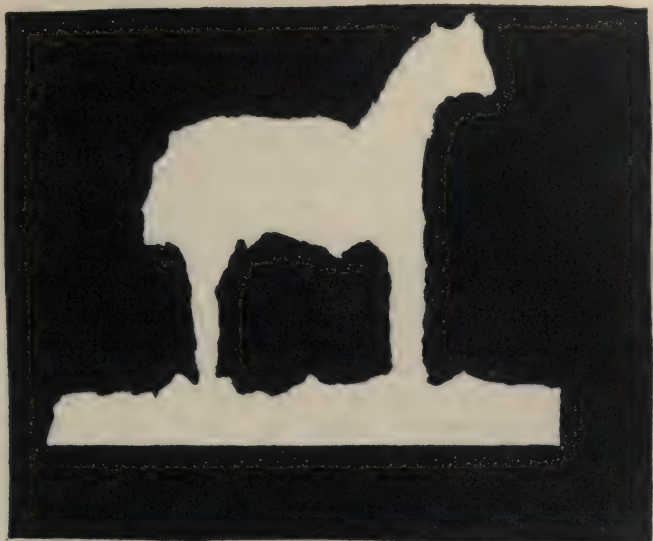
The climax of the year's work should be something made for use in the home, and beautified by the taste and skill of the little workers. The teacher should take advantage of opportunities as they come to impart lessons of good taste in the decorating and furnishing of the home. The construction and furnishing of a large doll's house by the children affords an excellent means for carrying out this plan. In furnishing this house, the children will use their construction and art work. Wall paper, curtains, rugs and furniture should all be made by them.

Test. Make a drawing from an animal.

Draw a design from flower or animal form to use as decoration for children's work in construction.

JUNE

O lovely June! O lovely June!
You're everything together;
Your skies so fair,
Your flowers so rare,
Oh stay, delightful weather!



Animals in Freehand Paper Tearing

CHILDREN'S WORK

46. The Annual Exhibition. The month of June has been called the birthday of the year, and certainly everything in nature has life in its fullest, and we are all re-created by the fullness thereof. To the children June stands for picnics, circus day, fishing, wading or swimming, closing days of school, and vacation time with life in "God's Out-of-Doors." Are you planning to have an exhibition of the children's work, and to invite the parents to visit the school? The opportunity of seeing the regular school work would be enjoyed by all parents.

The best way to exhibit the children's work in art is to arrange the studies on the gray pasteboard mounts. Do not place too many on one mount; six papers 6 x 9 inches, or three 9 x 12 inches, placed with equal marginal spaces, would be acceptable mounting. Paste the studies with a little LePage's glue at the four corners. Fasten the mounts together by tying them with gray cord through holes punctured at equal distances from the edge. Three hung together, if placed vertically, or four if arranged horizontally, would make a line extending from the picture moulding to the lower edge of the blackboard. Place loops at the edge of the upper mount, and hang with picture hooks. A screen covered with burlap is a very convenient means of making class exhibits, and it is especially desirable that exhibits of all the children's work should be made occasionally.

47. First Week. INVITATIONS. Tell the children that they may make invitations to send to their mammas and papas, asking them to come to the exhibition. The first grade might print the single word *COME*, and the date. The second and third grades could paint the words *Please Come to Our Exhibition*, and the date.

Use colored paper, or tint the manila paper, if you cannot secure the colored. Use a sheet 6 x 9 inches, folding it to make a little booklet. Decorate the outside page with a simple unit of design, using either a conventional flower or animal unit. Paint in black or appropriate colors. The brown-eyed Susan would be a good flower form. Use yellow and brown in this study. On the inside page print the invitation. Let the



E is for
Elephant



CIRCUS DAY MEMORIES

children practice the printing several times before making the invitations. Print the words on the board to show the children good lettering.

48. Second Week. (a) **OUTDOOR STUDIES.** This will be a good season to plan a school picnic. What good times the children will have, preparing the lunch, setting the table, playing games, perhaps wading, fishing or swimming! Tell the children to illustrate something they like to do at a picnic; show in a picture what they like to play. They may show, too, if it was by the lake or river or in the woods that the picnic occurred.

(b) **ANIMAL STUDIES.** Perhaps you can introduce such a lesson as this at a time when a circus is coming to town. Ask the children to show some of the animals, and begin by making a picture of the elephant in crayon or water colors. The teacher should obtain good pictures of the animals. Freehand cutting and clay modeling of the animals would be very good lessons for form study. See illustrations of elephants in silhouette and clay modeling, showing the children's work.

(c) **FLAGS.** Let the pupils make or draw or paint the things specially connected with Empire Day, celebrated three weeks before on May 23rd. Bugles, drums, boy soldiers, cadets and flags will give ample variety for such work. A boy may pose in cadet uniform for the others to draw. One day the model, when posing, should have a rifle at his side, another day a bugle, and a third day a drum. When the pupils have cut or drawn the pupil who posed, they may be allowed to color their pictures. As the flag formed an important part of Empire Day parade it should be drawn again and painted in proper colors to fix its construction in the memories of the children.

49. Third Week. **ART PORTFOLIO.** Make a portfolio in which to place the art work of the year, so that each pupil may carry his work home. Use heavy wrapping paper and fold the paper as indicated in the illustration. The full size of the sheet from which this may be cut should be 14 x 18 inches, to accommodate the drawing papers 9 x 12 inches.

The children can be directed to do the folding and cutting necessary to make this simple portfolio.

Directions. Take the paper, 14 x 18 inches, or larger, if a larger portfolio is desired, and fold all edges down to make a 2-inch lap on all sides. Then fold the papers through the center, making a portfolio form. Cut the corners as indicated in the illustration. Cut also the angles from the ends of the center fold, and allow it to fold more easily. The portfolio should then be decorated. Ask the children if they would like to put a border of flowers or animals across the top, or use two only, as the illustration of animals in silhouette suggests. The rabbit or duck would be easiest for the first grade, while the squirrel, cat, bird or fishes would be more difficult. The third grade pupils might print the word *A R T* in simple black letters. The flower units suggested on the same sheet could be used in a border, or a single unit might be placed on the cover of the portfolio. Try making the flower units in free brush strokes without a pattern. The animal form could first be cut and traced.

Use black, or mix red, yellow and blue together, making a tertiary color. This color will be harmonious with any colored paper used.

After the exhibition, let the children collect their work and place it in the portfolio to take home with them.

Test. Make a design appropriate for a stencil to use for a pillow top or curtains. Carry the design out in appropriate colors.

Draw a design to show an appropriate decoration for a Christmas gift made by your pupils.

Write a brief outline of work done during June.

PICTURE STUDY

50. Value. We cannot overestimate the influence of pictures on the growing mind. We, as teachers, have much to do to counteract the baneful influence of the so-called "funny" sheet in the newspapers. Children, as a usual thing, see very little high class art except what the teacher places before them. Let us try to have at least one beautiful picture in the

schoolroom that will appeal to the children, and at the same time give them an introduction to something of high grade.

Studies in color are particularly attractive to children, but it is difficult to obtain really first-class reproductions in color, and original paintings are often beyond our means. The strong poster-like color prints published by the German houses are very satisfactory. They may be obtained from the George M. Hendry Co., 215 Victoria Street, Toronto.

51. Method. Picture study in the primary grades should be conducted in a most skilful way, in order that the greatest good may result. Too much analyzing and moralizing is not necessary. The picture should be presented to the class in order to more fully illumine a thought. The children should have the opportunity to live with the picture for several days and a brief description should be given by the teacher before they are called upon for a description, either oral or written.

Pictures are introduced into the schoolroom in order that the imagination may be enriched, the emotions cultivated, the love of the beautiful fostered, and the love of the good made permanent. Besides the large pictures, which should be hung low enough for the children to see and enjoy, there could be introduced into the second and third grades the small prints for individual study. Inexpensive prints may be obtained from the Perry Pictures Co., Tremont Temple, Boston, Mass.; Cosmos Picture Co., 296 Broadway, New York; George P. Brown & Co., 38 Lovett St., Beverly, Mass., and the Turner Picture Co., Boston, Mass. Catalogues from these firms are helpful guides in choosing pictures suitable for use in primary grades.

52. Selection of Pictures. Below is given a list of pictures that have been chosen with regard to their story-telling characteristics, or because they are of such subjects as are especially interesting to children. Pictures of animals, children at work or play, and home scenes are those that attract the young child:

(a) **FRENCH ARTISTS.** Rosa Bonheur, *The Horse Fair*, *The Return from the Fair*, *Ploughing*, *Cattle in Brittany*, *Scotch Cattle*, *Lion and Lioness*, *Sheep*; Millet, *First Steps*, *Bringing Home the New-Born*



From the painting by Millet

FEEDING HER BIRDS

Calf, Feeding the Hens, Feeding her Birds, Peasant Grafting an Apple Tree, The Sower, Sheep Shearing, Potato Planting, Shepherdess Knitting, Churning, Spinning; Corot, Children Dancing a Round, The Dance of the Nymphs, The Storm, The Lake, Landscape with Willows; Breton, Song of the Lark; Julien Dupre, Hay-Making, The Balloon, Escaped Cow; Troyon, Oxen Going to Work, Return to the Farm; Jacque, The Sheepfold; Emile Adan, The Haymaker; LeRolle, Shepherdess, By the River, Arrival of the Shepherds; LeBrun, Mme. LeBrun and Daughter, Girl with a Muff.

(b) ENGLISH ARTISTS. Landseer, *Shoeing the Bay Mare, Dignity and Impudence, Member of Humane Society, The Connoisseur, King Charles Spaniels, A Deer Family; Reynolds, Infant Samuel, Angel Heads, Age of Innocence; Millais, Princes in the Tower.*

(c) AMERICAN ARTISTS. John S. Sargent's portraits of the prophets; Boughton, *Pilgrims Going to Church, John Alden and Priscilla; Winslow Homer, Fog Warning.*

(d) DUTCH ARTISTS. Ronner, *Pictures of Cats; Paul Potter, Landscape with Animals; Mauve, Sheep Pictures.*

(e) FLEMISH ARTISTS. Van Dyk, *Portrait of Children of Charles I, Baby Stuart.*

(f) GERMAN ARTISTS. Schreyer, *Arabs on the March, Arabian Outposts; Hofmann, The Childhood of Christ, In the Temple with the Doctors, St. Cecilia; Meyer von Bremen, The Pet Bird.*

(g) SPANISH ARTISTS. Velasquez, *Prince Balthazar, Infanta Margarita, Infanta Maria Teresa; Murillo, Children of the Shell, Dice Players, Beggar Boys, St. Anthony of Padua, Divine Shepherd.*

(h) ITALIAN ARTISTS. Raphael, *Madonna of the Chair, Sistine Madonna, Madonna of the Goldfinch; Luca della Robbia, Singing Boys; Titian, Madonna of the Rabbit; Guido Reni, Aurora.*

53. Aids. The following books and magazines are helpful in teaching art in the primary grades:

(a) TEXT-BOOKS. *Text-books in Art Education for Primary Grades.* (Cloth). Prang Education Co., 623 S. Wabash Ave., Chicago. *Progressive Lessons in Art Education.* (Paper). Prang Education Co., Chicago.

Parallel Course Drawing Books. (Paper). D. C. Heath & Co., Chicago.

The Applied Arts Drawing Books. Atkinson, Mentzer & Grover, 318 W. Washington St., Chicago.

Talks on Drawing, Painting, Making, Decorating, for Primary Teachers. Lou Eleanor Colby. Scott, Foresman & Co., Chicago.

(b) MAGAZINES. *The School Arts Book.* Davis Press, Worcester, Mass. *The School Century.* George W. Jones, Oak Park, Illinois. *Primary Education.* Educational Publishing Co., Boston.

CHAPTER FOUR

SPELLING AND PENMANSHIP

SPELLING

1. What Spelling Includes. The ordinary definition for spelling is, "Naming or writing the letters of a word in their proper order." This, however, is far from a complete definition, when the teacher sees the mental processes involved in good spelling. Spelling is more complex than a mere memory exercise upon letters in a given order. Perception, imagination, concentrated attention and general intelligence are all needed. Many repetitions are necessary, and the law of association must be called frequently into play before the work of memory is rendered easy and sure.

Perception of forms, similar and dissimilar, nearly alike and wholly unlike, as wholes or in parts, must be established as the first step in spelling, for spelling is quite largely a matter of *seeing forms* with absolute accuracy. It is evident, then, that every exercise which strengthens this power in a child is a sure, unmistakable help toward accurate spelling.

The above statements apply particularly to written spelling. To aid a child to become an expert in oral spelling, in addition to the eye-training (visualization) there must also be definite training of the ear, to enable it to perceive and distinguish between sounds with the same accuracy as that with which the eye recognizes resemblances and differences of forms. In fact, sense-training of all kinds will help children to become better spellers, because sense-training quickens and strengthens all the perceptive powers.

Those pupils who are naturally dreamy, who do not see or hear quickly the things that are going on around them because "their wits are wool-gathering," are almost certain to be poor spellers. On the contrary, those children whose perceptive powers are always alert, whose powers of attention and retention are good, are nearly always good spellers.

The exceptions are due to lack of interest or to inability to picture the word mentally.

2. Preparatory Work. Spelling is too often imposed upon children in such a way that they feel it to be a mere task, the usefulness of which they are unable to see. When the work is presented in this manner, poor results are sure to follow. The teacher should always bear in mind that spelling is a mode of expression. The child cannot express his thought in writing until he knows how to spell the words he wishes to use. When he feels the need of spelling as an aid to expression, he is ready to incur the labor necessary to acquire the art. In the first and second grades, then, reading, spelling and writing are so closely related that there should be no attempt to separate them. The child's first spelling lesson occurs when he is first asked to write a word or sentence used in his reading lesson. (See Volume One, page 30, Subsection b.)

Again, all exercises which aid in developing the powers of observation are aids to spelling. This applies especially to those lessons which promote accurate visualization. Every word learned as a whole from blackboard, chart or book; every word built with splints, pegs, lentils or alphabets; every word copied with crayon or pencil on blackboard, slate or paper; every word properly pronounced, and every word learned from the recognition of its syllables—all these, though not spoken of as lessons in spelling, are really elementary phases of this subject.

3. Oral and Written Spelling. During the first half of the first year, all of the spelling exercises are incidental and written. They consist first in copying words and sentences written upon the blackboard by the teacher, or presented to the class in some other written or printed form. The second step consists in writing these words and sentences from memory. The child must obtain a correct image of the form of the word before he can reproduce it in writing. This makes spelling in the primary grade purely a form study.

Oral spelling may be introduced gradually in the second

half of the first year, and oral lessons can be increased in frequency until in the third grade pupils may be required to spell all new words orally, as well as write them. Oral spelling is of value chiefly for the reasons that it aids in pronunciation and it adds the sound of the word to its visual form. Ear-minded children learn to spell orally with less effort than by writing, while children who are strongly eye-minded are probably assisted but very little by oral spelling. In practical life, the amount of written spelling exacted from the individual is much greater than the amount of oral spelling.

4. The First Lessons. When the child first begins to copy the words that the teacher writes upon the blackboard, his effort is given to reproducing the form, and his attention should be fixed upon the word as a whole. He has not arrived at the stage where he can analyze the word, that is, separate it into its letters. At first nothing should be said about letters. If the child is not able to reproduce the form, erase his work and ask him to look at the word and try again. Do not call his attention to the mistakes he has made; this only impresses the wrong form upon his mind, when it is the correct form that we wish him to remember. By strictly adhering to this plan, the teacher soon leads the pupils to study the forms of words carefully, and this is of the greatest importance in making a good beginning in spelling. If primary teachers generally would follow this simple plan, much of the time and energy would be saved which is now wasted in teaching first grade pupils to spell, and at the same time better results would be secured.

When the pupils have become accustomed to reproducing word forms, attention may be called to the letters. This should be done incidentally, as the teacher assists the children in writing the words and sentences. She may say, "Mary, your *w* is too large; James, you have made an *n* for a *u*; look at the word on the board and see how it is written," and so on, as she goes from pupil to pupil. Oral spelling introduces a complete analysis of the word by letter.

In the first three grades all spelling lessons should be related to the lessons in other branches, from which the words should be taken. No spelling book is needed in these grades, and unless forced upon the children by the course of study, it should not be introduced.

5. How Much to Spell. Some superintendents require a maximum of one hundred words as the work of the first year classes in spelling. These words are chosen chiefly from the reader in regular use, and the children are required to write these correctly from dictation and to spell them orally, as well. Other superintendents make a demand of two new words daily for the first term, three for the second and four for the third, leaving one day of the week for a review exercise.

For teachers of little or no experience, a definite assignment of work by superintendents or principals is fortunate, since it prevents the mistake of trying to accomplish more than can possibly be done well. Teachers of mature experience say little or nothing about spelling during the first term, knowing that time must be allowed for the children to learn letter names and letter forms and the ready recognition of word forms.

For the first term, then, let the oral spelling lessons be held in abeyance, and written spelling be emphasized by frequent exercises in visualization and by having classes build words and copy words, with the written copy always before them.

Oral spelling, as such, may begin with the second term. By that time, the class has a small written vocabulary definitely established as a part of its usable school material. From this select at first the words for the oral work that have become most familiar. The class will be pleased by promotion to the dignity of sharing the formal written spelling exercise with the pupils of the second and third grades.

6. Plan for Written Spelling. At a given signal, all desks are cleared of books and all other materials. Spelling slips and pencils are quickly distributed by helpers. Each child writes his name at the top of his spelling slip. The

teacher takes her place in front of the first grade, says "Ready," and requires every pupil's eyes to meet her own. Then she pronounces clearly and carefully, *once* only, a word, requiring the class in concert to pronounce the same word before any one begins to write it. The teacher now passes to the front of the second grade and proceeds as before, giving a word from the lesson for the second grade. In a similar way she pronounces for the third grade; then again for the first grade, and so on. When all the words are written, helpers collect the slips and pencils.¹

For the second and third grades, lists of words are chosen as before from the other subjects taught in those grades. Not more than four new words daily should be required at the beginning of the second year, but the number may be increased in the daily lesson to ten words by the addition of six words from review lessons. The new words may be increased to five for the third term of the second year. Once each week oral spelling may be given for review, and once a month for a general review of all words previously taught.

Begin the third year with six new words, reviewing four, for the daily lesson. Give an oral review once each week, and a general monthly review as before. During the year, gradually increase the number until the class learns ten new words and reviews ten in the daily lesson. This is the maximum for the last of the year.

Cautions. (1) In assigning the lesson, great care should be taken to use such words as will require about the same time and effort from day to day.

¹ The plan of collecting pencils is peculiarly unhygienic unless conducted in a proper manner. To collect all the pencils in a box and allow any child to take any pencil therefrom is a frequent source of the spread of disease. To obviate objections to the collection of pencils, the following simple plan may be followed: Procure for each row of seats a block of wood about the size of a brick, and have bored in it as many holes of the right size to hold each a pencil as there are seats. Each pencil may be easily marked by cutting a sliver from the unsharpened end and printing on the cut surface of the pencil an initial letter. As helpers pass the block around each pupil stands his pencil upright in the hole which corresponds to his seat. When not in use the blocks stand upon the teacher's desk. The helpers can distribute the pencils very quickly by passing down the aisles and allowing each child to take his own pencil from the block.

(2) Guard those who are naturally deficient in the qualities that are needed to make good spellers from thinking that they cannot learn to spell. They must be made to believe that they can spell, their interest must be aroused by varied devices and other lessons in visualization must be strengthened by much repetition.

7. Deficient Children. For children who are weak in the power to image a word as a whole, or to retain the image after it has been given, spelling lists of disconnected words is cruelly hard and of very little value. Such pupils should be encouraged to spell more frequently than others of the class by calling upon them to spell all or nearly all of the words in the general lessons that the teacher wishes to write upon the board. They should also be asked to write short sentences formed and dictated by the teacher from the words of the lessons. These two plans bring the law of association to aid the memory, while in spelling from lists memory is aided by repetition only. To give these children the exact meaning of the words to be spelled, brings again the law of association to strengthen the power of retention.

Oftentimes the whole trouble of the poor spellers comes from lack of full attention. Study the pupils, note the attitude of the body, the expression of the face, the look in the eyes. Then see that the poor spellers are made wide awake in every sense, and keep them so by requiring answers so often that while the lesson lasts they have no chance to become listless or lethargic. All this must be managed with great tact in order not to have their classmates notice that these children are doing most of the work in spelling. In other classes, keep them alert, but do not require them to do more than their fair share of work in subjects which they understand and prepare as well as their classmates. Commend their successes, particularly in spelling.

Encourage and stimulate effort by explaining how essential good spelling is. Even the poorest laborer needs to know how to spell when he writes a letter to his friends, or orders his coal and groceries. Also explain how much

more easily a person gets a good position in a business house when he can spell his words correctly, knows how to use capitals and punctuation marks intelligently and has a neat, legible and rapid handwriting. By such means stimulate ambition and at the same time show the close association between language, penmanship and spelling in their application to the practical needs of life. Of one thing we may all be sure. These pupils will never become accurate spellers until interest and ambition are fully aroused and the right methods of work become fixed habits.

8. How to Study Spelling Lessons. There is little doubt that more time is wasted over spelling than over any other subject. Pupils are allowed too long a time for study. Teachers, too, often fail to indicate the words that need the most time, so the children give as much time to the study of *ant* as they do to *gnat*; as much to *new* as *knew* or *gnu*; as much to *men* as to *people*, etc.

Attention during the study period should be keen, impressions vivid, and effort concentrated upon that which is really difficult. As a rule, however, the children are hastily told to "study these words twenty times; then write them twenty times, each; then put each word into a sentence." Perhaps a part of the words really need but one good, keen look to fix their images in the memory; others need all that has been asked and, possibly, a great deal more, in order to get the perplexing combination of letters accurately and permanently placed.

The most important spelling book for the child to study with great care is the list of his own missed words. He should write a list of all his errors in spelling—correctly spelled—at the back of his dictation book. The teacher should keep a special spelling book in which the words misspelled by all the pupils are kept on record. Some words give trouble to nearly all the pupils in the class. From this spelling list the teacher should conduct spelling reviews at least twice each month. Some teachers make their pupils write words misspelled several times immediately after the

mistakes have been made. Writing the words correctly once each day for five days is five times as effective as writing them five times the first day.

Suppose then, twenty minutes each day are allowed for the formal spelling lesson. Use the first fifteen for having the words written, as before explained; the papers corrected; sentences, each of which contains some word from the list, given orally and written upon the board; attention called to the use of capitals and marks of punctuation in these sentences; errors corrected therein by recalling what has been taught incidentally in the reading lessons. Vary the written lessons at times by using slates and blackboard instead of spelling papers or dictation books.

Use the last five minutes for the preparation of the next lesson, showing the class how to study it. From the new words found earlier in the day in the reading lesson, sense-training or nature study, select one by one until the required number is reached. Write each word clearly and distinctly upon the board, separating the syllables by a little space and placing the accent mark in the proper place. Pronounce each word and have the class pronounce it in concert. Call attention to silent letters, compound words, possessive mark and capitals, if any occur, and call for the meanings of doubtful words. If there should be *John's* in the lesson, caution the class to be careful about the apostrophe and the capital letter. When the word is spelled orally, require the class to pronounce the word, and spell it as, "Capital J-o-h-n-apostrophe-s," naming the capital and the apostrophe. In a compound word, the hyphen should always be written and should be named until the habit of writing is so firmly fixed as to render the naming unnecessary.

Cautions. (1) Train pupils to capitalize no words in lists except those that are commenced with capitals in all cases.

(2) Follow the same rule for use of the hyphen, apostrophe, etc. After all the words are written, have the class pronounce and spell orally, as follows: "hat'ter (pause) h-a-t (pause) t-e-r, hatter." This plan teaches syllabication, and

pupils learn unconsciously and easily where to separate a word at the end of a line when that becomes necessary. It also insures clearer enunciation, correct pronunciation, and prevents errors in spelling due to misunderstanding the word.

(3) Call attention to difficulties, thus: "You need to be very careful about these words. Notice the silent *k* in *knew*, and the silent *g* in *gnat* and the *apostrophe* here in *John's*."

After five minutes of this kind of work, briskly done, not more than ten minutes of study will be needed to master any lesson likely to be given.

(4) In case only ten minutes, or fifteen, at the most, can be secured for the spelling recitation, see that this preparatory treatment is given when the words occur in the reading or other lessons.

(5) No child should be trusted to study his spelling lesson without this preparatory help, since he is liable to see incorrectly or to miscall the words, and then go on repeating his mistakes all through his study period.

9. Visualization. At some time during each day, have a very brief exercise in the visualization of words. Get attention, write a word, and, after a moment, erase and ask the class to name it. It is better not to continue this exercise more than two minutes with the first grade children, because it demands intensity of attention, and the erasing is done so quickly that the strain to the eye is severe from the instantaneous and repeated change of focus required.

Frequently vary this drill by substituting objects for words. Show the object, instantly remove or cover it and call on the class to name it. Also train the pupils to look at a new word, close the eyes or look away and instantly tell if they can see the word with their eyes shut. While their eyes are still closed apply such a test as the following:

"What letter do you see first?" "What is the next letter?" "The next?" and so on till all are named. Suppose the word is *John*, and the first child says he sees *j-o-h-n*. When he is done, the teacher asks, "Do you all see it as

Fred saw it?" One child replies, "I saw a *capital j* first." The teacher may say, "Yes, that's what I saw." "Now let us look at the word and see just how it is." Or she may say, "What do you think about it, Fred? Should there be a capital *j* or small *j* there?" Fred will probably agree with the correction and in that case should be asked "Why?" If he really knows his lesson, he will be able to say, "There should be a capital *j* because *John* is a boy's name."

10. Value of the Imaging Power. This drill in imaging will help any child to learn to spell more rapidly than any other one exercise we have ever tested, and it is particularly helpful to the "backward" speller of any grade. This visualization is the quickest test for written spelling and is what most people rely upon when obliged to pass judgment upon the written work of themselves or others.

11. The Law of Association. In the primary grades, help the pupils by giving or illustrating the meaning of all the words they have to spell. Help them, too, by having many lessons consisting of words that fall into natural groups, as the names of the parts of a plant. For example, *sunflower, blossom, leaves, stalk, seeds, roots, large, yellow, broad, green, tall, rough, hairy, brown, many, hardy, strong*. Again, the lesson may be based upon units of liquid or dry measure, as *gill, pint, quart, gallon; pint, quart, peck, bushel*.

Familiar things to eat or drink; articles of clothing for children, for men and for women; articles of furniture for the kitchen, the dining room, the sleeping room and the parlor; names of vehicles; names of domestic animals; groceries to be ordered for breakfast, for dinner or for supper; fruits; meats; names of common diseases—all these subjects will furnish valuable material for many lists.

Children who have had their perceptive powers well trained learn to spell many things from posters and other advertisements. We recall giving a second grade class an interesting story that contained the names of many wild animals, such as elephant, leopard, tiger, rhinoceros and monkey. We were certain that the children had never

before met such words in a reading lesson. After a brief inspection of the story a delighted smile passed over the faces of many in the class and to our astonishment the children read the long, difficult paragraph with ease and much evident satisfaction. Upon inquiry, we found that they had learned these words from the circus bills then adorning all available vacant space in town.

12. Spelling and Drawing. To lend fresh interest to the study of spelling, have the children make outline drawings of the objects for which the given words stand. Such an exercise as this may be given in three ways, viz.: (1) The teacher draws the outline forms upon the blackboard, and writes the name clearly under each. The children then study and copy both drawing and name with the teacher's work in plain sight. (2) The teacher places the outlines upon the board, but writes no words. The children copy the outlines and supply the needed words. (3) The teacher writes the words only. The children copy the words and supply the drawings.

After a set of words, four or five in number, has been given in these three ways, a review of the lesson may be called for, in which the children are told to write the list of words from memory and supply the proper drawings without any copy.

13. Spelling in Sentences. In the first year, have the children copy a good many short sentences with alphabets, pencil and crayon. Occasionally have a short sentence written from dictation. Also have children copy quotations they have memorized, stanzas of easy poetry, directions for calling classes, etc. The thought is a great aid to the spelling.

During the second year, continue this copying and dictation, but extend the work to include longer sentences and entire paragraphs. In the third grade, the children will be glad to copy entire poems, fables, proverbs or other selections from blackboard and books. They will also take great pride in writing much longer exercises from dictation.

Cautions. (1) Be careful that everything given to the children in these ways is of a nature to afford them genuine culture. The memory is plastic and should be employed only upon things of real value. Anything else is sheer waste of opportunity.

(2) See that capital letters, marks of punctuation and syllabication are given the same attention as the letters that form the word. Make no deviations here from standard usage elsewhere.

14. Rules for Teachers. (1) Throughout all the grades, see that every written exercise is a lesson in spelling. Insist upon accuracy and neatness from the first day to the last.

(2) Do not often conduct the written lesson for the sake of the spelling alone. Inculcate a truth, and let the spelling be a necessary adjunct to its expression.

(3) When dictating words or sentences for the children to spell, follow this plan: Get the attention of the entire class; require the eyes to be fixed upon you; pronounce once, clearly and distinctly; require the class to pronounce, to write the word and to look again at you. Repeat the process. Adhere strictly to this rule from the very first in all grades, and much time will be saved and all confusion avoided.

(4) In oral spelling, have the pupils pronounce the word before spelling, pause after each syllable and pronounce the word again at the end. The pause after each syllable marks the syllabication equally well and takes far less time than to pronounce each syllable by itself.

(5) When two words having different meanings have the same pronunciation, the pupil has a right to be given the meaning of the word he is to spell, when the sentence of itself does not clearly show the meaning.

(6) In oral spelling do not pass a word missed by one child to others, as that gives the others the advantage of the previous attempts.

(7) Do not give too long lessons. Follow the suggestions previously given and review the work again and again.

(8) Do not give undue prominence to the long words. The very unusualness of their forms helps to fasten their images. Words like *which*, *whose*, *who* are often more difficult to learn than *sunflower* or *elephant*.

(9) Use constantly such devices as picturing, imaging, grouping, definitions and classifications to aid the memory in its efforts to retain the correct forms in detail, and bring in the needed repetitions by daily reviews. Keep up these lines until spelling becomes automatic.

(10) Do not make a fetich of spelling. It should not take the time that properly belongs to other studies. On the other hand, it should be kept actively and constantly before the classes as a valuable and necessary accompaniment to all the other lessons, and good spelling should be dignified as an accomplishment of high merit.

PENMANSHIP

15. Learning to Read Writing. The daily blackboard lessons in reading during the first month or two of a child's school life soon give him the power to read written words and sentences. This ability, however, does not imply that he knows the names of any of the letters used in the lessons; nor does it follow that he can write any of the words that he reads with such facility at sight. As a matter of fact, in nearly all schools the pupil soon learns the name of some of the letters incidently.

A little later the child builds words with written and printed alphabets, the teacher quietly giving the names and forms of letters when calling attention to mistakes in the building, as, "See, Harry, your *W* is upside down; that makes an *M* of it"; or, "This letter is open at the top; that is *u*. What you need is *n*, and *n* is closed at the top." Carrying out this plan teaches without loss of time the names of the letters, and trains the children to examine forms for minute differences. Daily practice gives them certainty as to names, helps the power of discrimination and gives excellent preparation for the formal lessons in penmanship as a distinct subject.

16. What Penmanship Includes. Writing, at first thought, seems a simple thing. In reality, it is most complex. The eye must be trained to see forms accurately, discriminating to the smallest differences. The spirit of imitation must be awakened, and the desire aroused to reproduce the forms that the perceptive powers have observed. The will-power must be awakened and the desire aroused to reproduce the forms that the perceptive powers have observed. The will-power must be called into activity to tell the hand what to attempt. The muscles of the hand must be trained to instant obedience. The habit of comparison must be established, in order to notice any dissimilarity between the original and the copy. Accuracy must be secured by doing the work again after criticism has pointed out the errors. The psychological order of a lesson in penmanship is, therefore, (1) observation, (2) imitation, (3) criticism and (4) rewriting, for greater accuracy.

17. Sense Training Aids Penmanship. We do not forget that penmanship is a science as well as an art, although during much of the first year we allow the child to follow it chiefly, sometimes wholly, as an imitative art only. All the time, however, we train his perspective powers by definite lessons in the recognition of forms. We train his power of criticism by lessons upon comparative and actual size (lengths and widths), and we give daily exercises at the blackboard and elsewhere for training in correct movements. Logically, then, by all these means, we are preparing the way for the later teaching of penmanship as a separate subject, requiring a recitation period of its own.

18. Objects Sought. The objects sought to be secured by primary lessons in penmanship are (1) correctness of forms, (2) legibility, (3) neatness, the last being rather an accompaniment to the other two and in demand from the first. Speed comes from practice, after accuracy and legibility have been secured.

From the first, however, there must be a reasonable degree of speed in writing, since movements that are too

slow result in wavering, uncertain, broken lines. Penmanship should be smooth and beautiful in its lines, and these qualities are seldom, if ever, produced by very slow movement.

With primary children, the teacher's rate of counting will establish the rapidity of work. Accuracy, legibility and neatness are the ends to be kept always in mind. Secure these first. Rapidity must come gradually, and from practising to a regular, methodical count.

19. The Teacher's Preparation. The close relation between reading, writing and spelling has been noticed, and in teaching penmanship in the primary grades the teacher must keep this relation in mind. The first lessons in penmanship are imitative on the part of the child. He should have good forms to copy, therefore the first requisite in the teacher's preparation is that she be a good writer on the blackboard as well as on paper, and the former is more essential in the first grade. She should be able to make even, well-formed letters of large size, and to do this with a good degree of facility.

The second step in her preparation is a knowledge of the elements of form which combine to make the various letters of the alphabet, and the movements necessary to produce these elements. Not that she should present this knowledge to the pupils, but that she may know what they must learn in order to become good writers.

The third step in the preparation is the formation of a definite plan of work. To be sure, the writing for the first term, and much of it for the first year, will consist in copying words and sentences from the reading and other lessons, but this copying should be made a means to an end. Knowing what the children need to learn to prepare them for formal lessons in penmanship, the teacher should proceed to teach these things in connection with the written work which the pupils do. The most important of these are position, form and freedom of movement, for they constitute the foundation of good penmanship.

20. Position. "From the start children should be taught how to sit at the desk, how to place their arms on the desk, how to hold the pen or pencil, and the correct position of the paper upon the desk. It is all-important that the pupils start right. At best, good writing habits are somewhat difficult to establish, and when wrong habits are formed at the beginning, it is very difficult to correct them. A right start makes writing easier with each succeeding effort, while a wrong beginning makes it more and more difficult to abandon the old and begin the true. Begin right and the right end will be the logical result."¹

21. Form. Form is in the mind. The pupil must have a clear conception of the letter or word before he can write it. He must not only observe this form, but he must observe it long enough and often enough to have an image of it impressed upon his mind. For this reason, setting children to writing upon the blackboard or on paper the first day they enter school is more liable to hinder than to help them in learning to write. A word or letter should be observed a number of times before the children attempt to write it. It is as essential to begin right in the matter of form as in that of position.

Teach perfectly plain, undecorated script. Ornamental penmanship has no place in the schoolroom. School training is for everyday business use, and the three great requisites of school penmanship are legibility, neatness, and, later, rapidity.

Test legibility of writing (1) by covering all words in the sentence except one, (2) by covering all the letters of a word except one. See if the isolated word or letter is instantly named, without a moment for studying its form.

22. Devices for Teaching Forms. To teach forms of letters, the following devices may be used:

The teacher stands with her back to the class, makes the letter very large upon the board, has the children study the form a moment and then makes the same letter on a larger

¹ C. P. Zaner, editor *Business Educator*.

scale in the air. The children imitate the motions. "Writing in the air" teaches the pupils to recognize forms from movement. It is often helpful to use the bottom of an empty crayon box and a slate pencil for this purpose. In such an exercise the sound of the pencil as it moves across the box helps materially to impress the form of the letter, eye and ear being united in action.

We have known adults who could easily read what a person was writing by watching the movement of his pen as it passed over the paper. This is not a difficult thing to do when the script is regular in form and when the pen makes enough sound to aid in the reading. From the sound alone, an expert may read what is being written when sitting opposite the writer, even when blindfolded. These instances are cited merely as proofs of the value of the devices suggested.

After forming the letter in the air, using the index finger instead of a pen, the next step is to repeat the air tracing, holding the pencil, crayon or pen in position ready for writing. The third step is to hold the pen or pencil just above the paper and trace again. The fourth and last step is to write the letter on the paper in the space assigned. The pupil should compare his written letter with the copy, criticise his own work and write the same letter again for greater accuracy of form. These may seem trivial practices, but they are necessary with little children whenever a new letter is given.

23. Movement. One of the fundamental facts in penmanship is that the correct *form* will be produced if the correct *movement* is made. This truth must be impressed upon the child in every way possible. Many exercises must be given to secure correct movement, the teacher counting through such drills. Day after day, over and over, just as often as a lesson in penmanship is given, this kind of practice must be given. The muscles of the arm, wrist and fingers must be trained into a *habit of moving exactly* in obedience to a spoken command.

Counting not only regulates the rate of speed, but establish a habit of working under command that leads, finally,

to the muscles yielding obedience to the unspoken, mental command given by the pupil's own brain. And this is the end for which all the daily exercises in movement are given.

Cautions. (1) It is ruinous to good writing for the teacher to urge pupils to hurry when writing, or to give so much written work as to force pupils to hurry in order to accomplish the work in the time given. Form is sacrificed to speed, and both legibility and beauty are lost. Haste invariably creates nervousness, and smooth lines depend upon tranquillity of mind and an even pulse.

(2) What the primary children need is (1) the power to see forms with perfect accuracy, (2) training for securing correct movements and (3) the power intelligently to follow a good copy.

24. Material. It requires a skilled workman to succeed with poor tools. If we wish to secure good results in penmanship in the primary grades, the pupils must be provided with suitable material. Until the grade is reached in which copy books are introduced, the writing material should be provided by the school authorities. This assures uniformity of material, as well as a saving of expense.

(a) **CRAYON.** A good quality of crayon, suitable for the blackboard surface, should be selected. If slate boards are used, a fine crayon of medium hardness should be chosen; if the boards have a rougher surface, a softer crayon is needed. The crayon should be broken into short lengths so the children cannot hold it like a pencil; otherwise, some will write on the board with the finger movement.

(b) **PENCILS.** A good grade of soft pencil should be employed. A grade corresponding in hardness to a No. 2 or a Dixon S. M. is most satisfactory. The pencils should be of the largest diameter obtainable. The chubby fist of a six-year old is not fashioned to hold a small pencil with ease; small pencils tire the children and are a cause of poor work.

(c) **PAPER.** In the first and second grades, unruled paper should be used. In the second half of the second

year and in the third year, ruled practice paper should be introduced, but the ruling should correspond with that in the copy books. The paper should be used as freely as needed, but it should not be wasted. If the sheets are too large, they should be cut to the desired size before distributing. The paper should be of good quality for writing with a pencil. The surface should be smooth, but not glazed. If too rough, neat work cannot be done.

Caution. If possible, avoid the use of slates.

(d) **PEN AND INK.** Ink of good quality, pens with rounded points that slide over the paper readily, and penholders as large as the pencils, are necessary to good work. In selecting pens, avoid stubs, those with fine points and those that are elastic.

Introducing children to the use of ink is a difficult thing for teacher and class. In some city schools this is done in the first year. It is one difficulty, however, that may and should be spared these little ones. To enforce the use of ink so early may cause excessive nervousness, and in all cases the result is inadequate for the time expended. In our judgment, the last term of the second year is early enough, even in city schools. For the rural schools, where the year is usually much shorter, the beginning of the third year is a still better time. By that time most of the mechanics of penmanship are mastered and the pupils are old enough to have more careful habits. As the use of slate pencils and hard lead pencils creates a habit of exerting too great a force, the use of pen and ink should rarely, if ever, be postponed beyond the time named. Neatness and the child's best work should be insisted upon from the first.

25. Ruling and Rulers. A word concerning the introduction of ruled paper and of ruling on the blackboard may not be out of place. Freedom of movement should be sought from the beginning. If the child is bound by ruled spaces, it is impossible for him to secure freedom. The nervous system is plastic, and the muscles are untrained. To ask a child of six to make his letters of just such a height

and width is to impose upon him a wearisome task which he will fail to accomplish. Therefore, for several months he needs unruled paper. However, when he has become accustomed to the use of the crayon and the pencil, and has learned the movements used in making the letters, he can begin to bring these movements under better control. At this stage of the work he is ready for ruled paper. In the first paper used the spaces should be wide—not less than three-eighths of an inch, and one-half inch is better.

Rulings on the blackboard should be proportionate to those on the paper, and the copy should be written there just as the pupil is expected to write it in his practice paper. For a time most of the children will write over the lines. But this should not discourage the teacher. By practice they will soon gain such control over their movements as will enable them to keep their writing between the lines. As the pupils progress, the spaces should be narrower until the ordinary-sized writing is obtained, which should be some time in the third year, for most pupils.

Good lines can be made on the blackboard by soaking common crayon in a solution of equal parts of mucilage and water. The lines drawn with this crayon will not erase, but they can be easily removed by a damp sponge or cloth. For this reason they are more convenient than lines made with white paint. The crayon should be sharpened to the desired width of the line before soaking. Thin rulers from six to ten feet long and two inches wide should be used for ruling the blackboard.

26. Writing on the Blackboard (a) BY THE TEACHER. In Section 19 we have emphasized the importance of the teacher being skilful in writing on the blackboard. Here we wish to notice the relation of this writing to the work of the pupils. By watching the teacher as she writes, the pupils see how the different letters are made, where they begin and where they end, and which way the hand moves to make them. In her illustrative writing the teacher should stand so that all the class can see the movement of her hand and

arm, and the writing should be large enough to be easily read in any part of the room. For first primary children the letters should be at least three inches high, and four inches is better.

(b) **BY THE PUPILS.** The first writing done by the children should be on the blackboard, and the first exercises should consist of whole-arm movements, which will familiarize them with the oval and the straight line. See Exercises 1 and 2, page 180.

At first say nothing about size, but ask the pupils to make rings as you do, then draw an oval by a sweep of the arm. Practice these exercises several times before asking the children to attempt words. When words are attempted, impress upon the children the importance of making the writing large, like yours.

Large writing on the blackboard by the children calls into action the muscles of the shoulder and whole arm. A development of the muscles of the shoulder gives strength and skill to the muscles of the whole arm. Development of the whole-arm muscles likewise reacts upon the forearm muscles and gives them power. Development of the forearm muscles gives control of the thumb and finger movements, so the large writing on the blackboard gives power, skill and precision to the muscles of the forearm, hand and fingers, so necessary to good writing.¹

27. Seat Lessons. The child should not be made to feel that writing is something imposed upon him as a task. The subject should be so presented that he realizes that learning to write is a necessary means to an end. Children like to tell what they know, and they like to be able to tell it as grown-ups do. When they realize that they must learn to write before they can tell those far away what they are doing, they attack the work with vigor.

Before much copying is attempted, drills on the oval and the straight line should be given. See Exercises 1 and 2. Here it pays to make haste slowly. We cannot expect to make penmen of children in the first grade, but we should

¹B. D. Berry: *Teaching Writing*.

attempt to lay the foundation for such practice as will lead to this end. This is far more important than that the children become fair copyists. Concerning the evil effects of this early desire for a finished product, one of the most successful teachers of penmanship says:

One stumbling block to progress is the almost insane desire on the part of school officials and teachers to show finished formation at once, and it requires very little skill to teach pupils to make tremendously large script forms with whole arm movement; or to show them how to draw accurately with slow finger motion, in cramped positions, script forms that are placed before them. On the other hand, it requires skill of a high order to teach pupils how to sit, how to relax sufficiently and how to hold pens correctly.

Members of an infant class, as they enter school and begin the study of writing, should be taught how to sit; that is the first step. They should be taught how to rest their arms on the desks; that is the second step. They should be taught how to relax sufficiently to secure action from the muscles of their right arms when those arms are resting on their desks; that is the third step. They should be taught how to hold the pens lightly and easily in their hands, following correct physiological principles; that is the fourth step. All this should be done before any attempt is made to teach them how to make letters.¹

It is not necessary to give the entire writing period to these matters, but before the class begins to write the teacher should see that everyone is in correct position and has his pencil in the hand as it should be for writing. Their desire to reproduce the copy exactly will lead the children soon to forget all that has been said about position, and the teacher will need to pass among them and quietly correct each faulty position as the exercise proceeds.

Caution. The price of good penmanship is eternal vigilance. Do not assign first and second grade children written work at their seats and then leave them to their own devices while you attend to other matters. This practice leads to the formation of many bad habits in writing.

28. Plan of Work. It is better not to require pupils to learn rules about position and pen holding. As before said,

¹ A. N. Palmer, editor *American Penman*.

teach these by illustration, at first, saying, "This is the way the body must be when writing. The feet must both be squarely on the floor, like this." In like manner show the positions for paper, arms, hands and pen.

It is not well to say too much in a general way about how to hold the pen. Explain that holding the pen tightly cramps the fingers so that they soon get too tired to write. Show that holding the pen lightly prevents fatigue and gives smoother and more rapid writing. Finally, by precept and example, teach that the pen should be held with only enough firmness to keep it from slipping from the fingers; that the fingers must be well back from the point or there will surely be inky fingers and blots upon the paper, both of which destroy the desired neatness.

Children must also be trained to keep the side of the hand up from the paper, as the hand soils the page and makes slow, difficult writing. The same care must be used in dipping the pen into the ink, wiping the pen, using the blotter, and all the other little niceties necessary to secure absolute neatness of page and person.

Caution. It is often the fault of teachers that children seem so very careless or indifferent in these matters. Some teachers talk so much that children become nervous and over-anxious and from these causes alone do the very things they are striving *not* to do. The directions should always be clear and brief and positive. "Do it *this* way, Mary, and it will come right."

A sharp reprimand brings tears, anger, sullenness, indifference. Commending a neat page, good position of the body, pen, book or whatever deserves it, arouses the pride and ambition of the other children, even when not a word is said except to the one child most interested.

Sometimes it is well to hold up a particularly nice page for the class to see. "Some day I hope every boy and girl here will do just as well. Henry has tried so hard I wanted you all to see how good his work is." Such remarks arouse emulation, but not envy. They stimulate a friendly

interest in the work of a classmate without exciting jealousy.

29. Causes of Trouble. A common cause of much trouble is the habit many teachers have of saying, for instance, to a child or a class, "Watch the vertical lines in this and *not* the horizontal lines. You mustn't even think of the horizontal lines *at all* in *this* lesson." Emphasize only what you desire to establish. In the above remarks so much more is said about what *not* to do that the child loses sight of what he is desired to do. Telling him *not* to think of the *horizontal* lines, *at all*, makes it almost impossible for him to think of anything else. Thus, many times a day, in the average schoolroom, we hear the teacher *suggest* faults to children that otherwise might never have developed.

Commending Charlie's work that is *right* suggests to all the class that it is worth while to try to do the same thing as Charlie did it, because commendation is precious to every child.

30. Patience and Persistence. Penmanship is so necessary that it must be taught. To teach penmanship under the most favorable conditions is a trying ordeal for any teacher, and with the multiplied difficulties of the rural school it becomes still more difficult. If teachers could learn to look upon obstacles caused by environment as so many challenges to their reserve powers, the task would be easier.

31. Causes of Poor Writing. It sometimes happens that children will do well in the penmanship lessons and write disgracefully in other exercises. This undesirable condition may come from two or three causes. Evidently, the child fails to associate penmanship with the writing required in connection with other subjects. Often, too, the teacher gives more written work than can be done well in the time allowed. Again, papers are marked without counting good, legible writing and neatness as important factors.

32. Time for Lesson. Twenty minutes is sufficient time to give to a penmanship lesson in primary grades. The time should be divided as previously suggested and the lesson

followed by one that requires an entire change of position and thought. All the pupils of the school should write at the same period, to save waste of time and effort. To alternate penmanship with drawing secures better work than to have both subjects every day.

The best time for the lesson in penmanship is just before recess in the forenoon or the afternoon. On account of other subjects, that time may not be the most convenient to use. Any time will do, provided the light is good, the room free from excitement and the previous lesson has not required the same sets of muscles and the same powers of thought.

Caution. It is never well to have the lesson come immediately after recess, because the pupils come in from the playground excited and full of activity and with the blood bounding through their veins. Give a little time for the excitement to subside and for the blood to resume its usual tranquil flow before beginning the writing lesson.

33. Uniformity of Handwriting. Absolute uniformity of handwriting among pupils is not possible, nor is it desirable. In spite of any efforts to make children work as machines work, individual character will imprint itself upon the handwriting. In past years, many labored faithfully to secure uniform slant from primary children, but the size and shape of hands were different, temperaments were different, and, in spite of all efforts, the results were different.

If left entirely to themselves, most children will hold slate or paper so as to give no slant to their writing, and we believe that for blackboard work, and for other copies during the first three years, a writing with little or no slant is preferable. As children write more and gain greater speed, the natural momentum will change the vertical into a slight slant without seriously affecting the legibility of the writing.

34. Exhibition of Penmanship. To encourage effort, samples of the writing should be taken once a month. Sometimes these may be posted on the screen in the room or

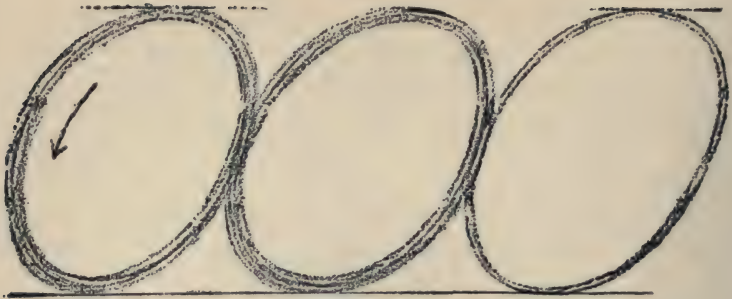
hallway, sometimes sent to the superintendent's office to be compared with the work of the same grades from other schools. Occasionally a sample should be sent home. Being able thus to see his progress from month to month is a great incentive to earnest effort on the part of individual pupils.

35. How Much to Do. It is impossible to say exactly how much a child should do, as the amount depends largely upon the time. Books are not needed till the second half of the second year, but practice paper should be supplied. The usual rule is one book for a term after that time. In the early part of the first term, teach the pupil to write, from copy, his own name and postoffice address. Days of the week and names of months should be added before the end of the first year.

Formal lessons covering the full period need not be given to the children of the first grade until the third term is reached. Beginners should, however, from the first, take the drill exercises for movement with the second and third grade pupils. Copying words or sentences, under the supervision of the teacher, may fill their time while the other two grades use the copy books.

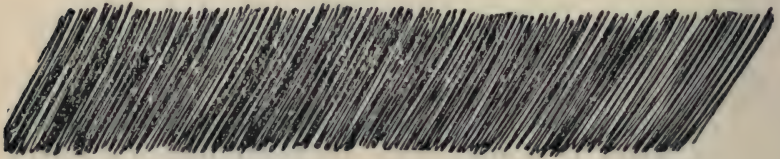
36. Drill Exercises and Counting. So much depends upon the counting being done properly when the class is having drill exercises for muscle training, that the first drills should be given with counts. Sets of movement exercises will be found in copy books. For primary grades the teacher may copy, from her own books, exercises upon the blackboard for the children to imitate on practice paper and blackboard.

The following exercises illustrate the practice and counting for the most elementary movements. In all cases when the class is ready for practice, give the command "Ready." The teacher's counting should always be as regular as clock ticks, and the children should be trained to stop at the exact spot and on the instant. This will require great patience and much encouragement.



EXERCISE 1

This exercise is very easy. Count *one* on the down stroke.



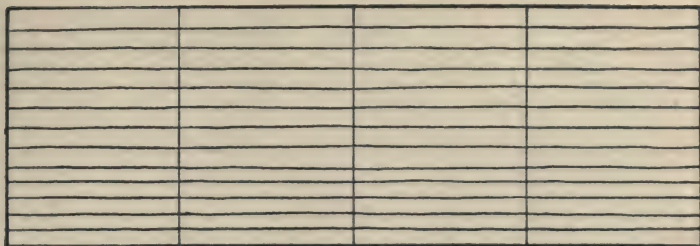
EXERCISE 2

Count *one* on the down stroke and *and* on the up stroke; as, *one and, one and*, until the exercise is finished.



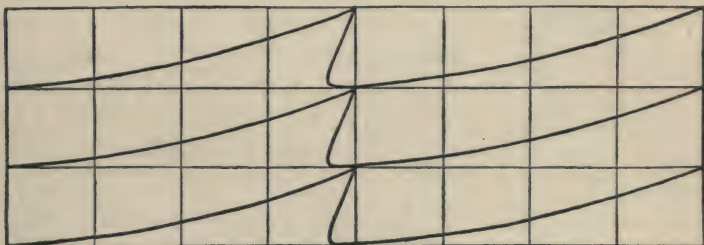
EXERCISE 3

This is a combination of one and two, and is counted in the same way. Begin by saying, "Straight lines; one and, one and;" change to the oval by saying, "One, change, one, one, one," etc.



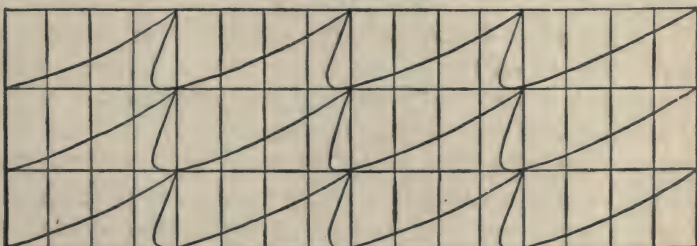
EXERCISE 4

Begin exactly at the left-hand line and stop exactly at the right-hand line. Make no stops between the lines. Give the counting thus: "Ready, slide; ready, slide; ready, slide."



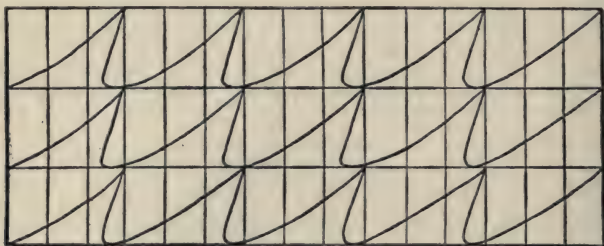
EXERCISE 5

Begin in the lower left-hand corner of the first square, slide to the upper right-hand corner of the fourth square, descend to the middle of the fourth square on the count *one*, slide to the upper right-hand corner of the eighth square. There is no stopping place until the end of the movement. Give the counting thus: "Ready, slide, one, slide; slide, one, slide."



EXERCISE 6

This is merely a continuation from left to right of the fifth exercise; the hand should not stop on the downward stroke. Give the counting thus: "Ready, slide, one, and, two, and, three, and."



EXERCISE 7

This is a modification of the fifth exercise, the slants being shorter and more abrupt. Give the count thus: "Ready, slide, one, and, two, and, three, and, four, and."

In presenting a new exercise, the teacher should have the diagram upon the blackboard and illustrate what she desires the class to do.

37. Aids. There are but few books which give direct assistance to teachers of penmanship in primary grades. The most useful of these are the following:

Sprott's System of Business Writing. Parts I. and II. Commercial Text Book Co., 383 Church St., Toronto.

The Arm Movement in Writing. Teachers' Manuals 1, 2 and 3. C. P. Zaner. Zaner-Bloser Company, Columbus, Ohio.

TEST QUESTIONS

1. Upon what senses does the pupil rely in learning to spell? Give an outline of one or two lessons that you would give second grade pupils for training their senses with a view to their direct relation to spelling.

2. Of the plans suggested under *How Much to Spell*, which do you prefer? Why? Give reasons for your answer. How can you so use your exercises in oral spelling as to make them helpful in written spelling?

3. How can spelling be taught so as to keep the pupils interested and prevent them from feeling that the work is drudgery?

4. Give your method of assigning the spelling lesson to pupils in the second and third grades, stating your reasons for the different steps. How does visualization in nature study and other subjects aid in spelling? Why do pupils frequently misspell words when used in sentences that they spell correctly in lists? Does the reverse of this often occur? Why?

5. Explain your plan for obtaining material for spelling lessons in a third grade where no spelling book is used.

6. Show how reading, language and number lessons assist the pupils in learning to write. What lessons in sense-training can be given with a view to their direct bearing on penmanship?

7. Should pupils in the primary grade write a large or a small hand? Give reasons for your answer. Should the teacher give much attention to slant in the primary grade? Why?

8. What preparation should the teacher make for lessons in penmanship in the primary grade? What care must the teacher exercise in placing all written work upon the black-board? Why?

9. In the regular lessons in penmanship, which is the more valuable, the drill exercises or writing from copy? Why? Why is penmanship often neglected in the rural schools?

10. How can you prevent pupils who do good work in penmanship from doing poor work in other written exercises? How can you secure a permanent interest in penmanship on the part of pupils above the third grade?

CHAPTER FIVE

PHYSIOLOGY

1. The Teacher's Preparation. No other teaching requires such thorough preparation as that in primary grades, and this maxim cannot be more forcibly applied to the teaching of any subject than to that of human physiology. Health and strength at maturity are largely dependent upon the early formation of right habits and consequent early growth; therefore, no study can be of more practical value than one which clearly points the way to such habits. The teacher should have a comprehensive knowledge of the facts and principles of anatomy, physiology and hygiene, and she should be able to make clear and forceful applications of these facts and principles without the use of technical terms; and above all, she should be able to adapt her lessons to the capacity of the pupils. The teacher should own one or more good physiologies of high school grade, and, if she can afford it, a larger work, such as Martin's *Human Body* (unabridged edition) or Retgers's *Advanced Physiology*. In addition to these, she should have two or three of the best primary physiologies in current use. The best of these books are of great assistance in the selection of material and the planning of lessons.

2. Purpose Outlined. In the primary grades no attempt should be made to teach physiology, anatomy or hygiene as a science, not only because that would involve the use of many difficult terms and the study of intricate and difficult laws and relations quite beyond the understanding of such young children, but also because lessons of this kind usually react unfavorably upon the children.

Children under ten years of age should not be taught the complicated facts of anatomy; and seldom, if ever, should they have their attention called to the structure or functions of the internal organs before reaching the fourth grade.

It is important that primary teachers keep this fact constantly in mind in giving lessons on the human body. During the first three years of school life the mind is keenly susceptible to impressions. If led to dwell upon the structure and functions of the system, the vague ideas acquired are too often extended by a vivid imagination which at this period is not subject to the reason, and as a result the child becomes morbid and abnormally sensitive.

In the first three years of school life, however, the pupils may easily be taught many helpful and valuable facts pertaining directly to the human body and its daily needs. Such lessons necessarily will be based upon the elemental ideas of hygiene and upon the formation of right habits.

These primary lessons should be limited to the human body and made entirely practical, with no attempt to be exhaustive in the treatment of any of the sub-topics. The general aim should be to teach the pupils to recognize, locate and name the principal parts of the body, as head, trunk, limbs, and to teach the general laws of health.

3. Hygienic Results Expected. By no other means, perhaps, can the child so readily be taught the importance of proper care being given to the body as through the direct teaching of hygienic facts and laws. By no other means can he so quickly be made to understand that, even in childhood, he must himself be directly responsible for a great portion of the care-taking necessary to health.

At no period in life is one more amenable to reasons that can be understood than in early childhood. The question, "Why," so sure to follow a statement made to a child, is the reaching out of his intelligence after the reason for things. A study of the simplest facts about his body and the laws that govern its health will give him the reasons for many prohibitions which form a marked feature of his daily experience. A knowledge of these facts and laws will change these prohibitions from arbitrary commands, to which he must yield whether he wishes or not, to appeals to his understanding.

These elementary lessons should be carefully planned and systematically presented, each establishing a definite point, tending towards the ultimate aim of the series. The lessons must be brief and each new fact must be thoroughly taught, leaving no inaccuracies or misconceptions to be laboriously unlearned later.

It may be very difficult to demonstrate the necessity for continuous care of the various parts of the body, and most difficult of all to create an interest deep enough to induce the pupils of the primary grades to form permanent habits of the right kind in regard to cleanliness, food and drink, fresh air, exercise and all else that pertains to hygienic living. To this end lessons on foods are very helpful.

The ends outlined above are not at all impossible, even in the rural school remote from the great commercial and educational centers. We believe that by means of lessons such as suggested many of the illnesses common among school children might either be wholly eradicated or lessened in frequency and in the severity of their after effects; also, that the knowledge thus gained by the children would extend, ultimately, to those homes wherein lurk all disease-producing conditions and gradually change such conditions into something more sanitary and wholesome.

There can be no doubt that by the establishment of thoroughly hygienic habits of living, the standard of morals and manners in any community is raised. This result might, and probably would, require a long time to secure, but, once secured, it would be lasting. For all these reasons, then, a place for the lessons in elementary physiology should be made, even in the first school year.

4. Correlation with Other Subjects. (a) **NATURE STUDY.** The lessons upon the human body form an excellent and natural introduction to the study of other forms of animal life. It is nature study in its highest form, but it may be presented first, rather than last, because of its special interest and personal value, and because the subject for study is always present.

These lessons, simple as they are, prepare the way to the understanding of the adaptation of the organs of other animals to their peculiar habits, propensities and localities. Observation and comparison are constantly appealed to and the children learn to see the striking resemblances and differences between the habits of life found in man and those of the lower animals, and, to some extent, they learn the reasons for such habits.

(b) READING, SPELLING AND LANGUAGE. In the study of the human body and its needs, the pupils are constantly enlarging their vocabulary, adding new words and phrases that enable them at once to express the new knowledge gained and also to modify and improve their expression of ideas previously obtained. We should therefore make use of everything available in literature, art or song that will add to the attractiveness or usefulness of the instruction in physiology. Thus, in studying food values, the children may commit to memory *The Corn Song* by Whittier. The teacher may read or tell the children the story of the fast of Hiawatha and the gift of Mondamin. The new things learned form the basis of many interesting blackboard reading lessons and furnish excellent material for spelling lessons.

(c) ARITHMETIC. These lessons are easily and naturally correlated with the elementary arithmetic work by having parts counted, relative and actual size, length, width and weight studied, measured and compared. Many interesting illustrations for the facts in number and many very simple problems may be based upon the work accomplished by these first lessons in physiology.

(d) ELEMENTARY GEOGRAPHY. Here again physiology may be correlated with one of the fully established subjects of the primary grades. This will come most easily and naturally when studying the homes of men and the homes of lower animals, with the natural and enforced reasons for the selections made; also in the third grade, by the study of the different articles of food and the sources from which they are obtained.

(e) **SENSE-TRAINING.** Physiology and sense-training are inseparably connected, since the training of the special senses would be of small value without a knowledge of the sense-organs. The facts relating to location, parts, adaptation to use, care needed to heighten their value, habits and things that are injurious, are all needed to put the training of the senses upon an intelligent basis and render the work of permanent, practical value.

5. Method of Procedure. Teach this subject just as you teach anything else which you wish to have the pupils permanently retain so that it will influence their lives—for instance, just as you teach number and language. In these subjects, when the pupils first enter school you call their attention to a few facts which they can understand; then you fix these facts in mind by repeated drills. Each year you add more facts to the same branches to meet the pupils' enlarged development as they pass from grade to grade, until the truths they have been taught become a part of their stock of general knowledge. As time goes on, the pupils scarcely remember when or how they learned these facts; they seem always to have known and been influenced by them. Teach physiology and all that pertains to it in the same way, and you will secure the same results.

Technical terms are not needed during the first three years, and should not be introduced until text-books are taken up. Whenever names of parts and other terms relating to the subject are used, such words should at once be written upon the blackboard and kept there for several days, if space will permit.

Before the lesson closes, give a brief drill upon the new words used. This drill should be upon pronunciation, recognition of words as wholes, and upon the spelling of each word. In case the blackboard space is limited, transfer the words used in these lessons to a chart page where they may be kept for building models, copying and other forms of review.

When any outside illustration is needed to make a particular point clear or to impress a truth, decide what this

shall be and get it well in mind. To emphasize the usefulness of the eye we call it "the window of the body." The heart is "the great pump of the body that never stops day or night as long as life lasts"; "the best kind of feet are those like Minnehaha's, that 'run on willing errands'"; "the most beautiful faces are the ones that reflect beautiful souls in a pleasant, happy expression and good-natured smiles"; "the most beautiful hands are those that are always finding kind things to do."

These lessons upon general hygiene may be given in connection with lessons upon special parts of the body and their uses, or they may be given incidentally as fitting opportunities occur. They should be based upon analogies and should be wholly informal in character.

6. The Earliest Lessons. There are so many new things that the child must become familiar with when he first enters school that the teacher should give a generous amount of time during the first two weeks to making him acquainted with his new environment and its requirements.

Necessarily, there must be much drill upon the uniform movements and the daily routine of the schoolroom. The child should be taught how to sit at his desk, how to rise easily and noiselessly, how to stand well poised, how to walk properly, how to run lightly across the floor and how to resume his seat quietly and gracefully.

There should also be systematic teaching and regular, daily drills in the art of breathing properly. Too much stress cannot be placed on teaching the child to keep the mouth closed and to breathe through the nose in all walking and running exercises, at the same time keeping the chest well up that the lungs may have room to expand. All these exercises are of the highest sanitary and disciplinary value. They inculcate health and also teach the idea of perfect, instantaneous obedience by training the child's muscles to follow the example or word of the teacher and the child's will to obey her will in the commands pleasantly given.

The breathing exercises may be given in connection with the reading or spelling lessons, or as a part of the drill in phonics. Being a distinct help to such lessons, they cannot be said to encroach upon or waste the time properly belonging to the regular work as outlined by the program. They should always be brief, never taking more than one or two minutes of time.

The drills in schoolroom movements, for securing muscle-training and concerted, rhythmic action on the part of the class, should also be given without using time needed for regular recitations. To prevent encroachments, use for this work the five-minute periods designated on the program for rest, recreation, physical exercises or indoor recesses.

After the first two weeks of such training and drill, the children should be so familiar with the routine movements that daily work of this kind will not be necessary. When lapses of memory become frequent, correct the habit by a rapid review, being insistent upon accuracy and promptness.

After hygienic habits have become established by means of the foregoing methods, the pupils are ready to begin upon more formal lessons, although the manner of presenting them will remain informal. For the convenience of the teacher, the lessons are arranged in groups.

This does not imply that all the material included in one group is to be completed before the child may be given anything from another group. The grouping, as before said, is for the convenience of the teacher and practically covers under each topic everything that should be attempted during the first three years of school.

How much of one group of lessons to give before beginning upon another must be determined by the judgment of the teacher. She will see what is most needed and what her pupils are able to assimilate and put into practical use. Incidentally, in connection with every part of the day's work or play, there will be opportunities for emphasizing some hygienic truth or need. These opportunities are golden

when made use of naturally, gently, tactfully and in the spirit of kindness.

7. Parts of the Body. (a) MAIN DIVISIONS OF THE BODY. Head; trunk; limbs: upper (2), lower (2).

(b) LOCATION OF MAIN DIVISIONS. The *head* is the highest or topmost part of the body. The *trunk* is the middle portion of the body. The *neck* joins the head to the trunk. The *limbs* are four in number, two upper limbs, called arms, and two lower limbs, called legs. The arms, or upper limbs, are joined to the upper portion of the trunk, one on each side. The legs, or lower limbs, are joined to the lower portion of the trunk, one on each side.

8. Illustrative Lesson. Stand a little boy in a low chair before the class. Pass your hands over his head, asking, "What am I touching, Nora?"

"Frank's head."

"And now, Harry?"

"Frank's arms."

"The arms are joined to what part of the body, Charlie?"

"The upper part."

"What are these, Nelson?"

"Frank's legs."

"The legs are joined to what part of the body, Minnie?"

"The lower part."

"And what is all this large middle part of the body called, William?"

It is doubtful if any child will give the name *trunk*. In that case ask, "How many can think just how a tree looks?" "What is the strong middle part of a tree called?"

"The trunk."

"And what grow out from the trunk of the tree?"

"Branches."

"What other name is there for the branches of a tree?"

"The limbs."

"Then the main parts of a tree are called what?"

"The trunk and limbs."

"Well, the strong, middle part of the body has the same name as the strong, middle part of the tree. Who can give the name now?"

"Trunk."

"Since we call this part (touching) the trunk of the body, if we still think about the tree, what may we call these (touching arms and legs) because they grow out from the trunk?"

"The limbs."

"And these limbs grow out from what part of the body (touching arms)?"

"The upper."

"So they may be called what limbs?"

"The upper limbs."

Use the same plan to get the statement that the legs are the lower limbs of the body. Review rapidly by touching the parts, having the children name them in concert. Write the first outline upon the board. Review again by saying, "Fred may find his head." "John, lift your arms." "Harry, touch your legs." "Mary, show the trunk of your body," getting the correct statement, as, "This is my head," "This is my trunk," etc.

All the lesson must be given very rapidly and the interest kept alert by skilful distribution of questions and work. Ten minutes will be ample for such a lesson, and should bring every child actively into the recitation several times.

Use a similar method for each of the succeeding lessons of the course. Choose illustrations, objective and literary, with the utmost care. When the above lesson is again reviewed, explain that there is another reason for the name *trunk* of the body, that it holds most precious things inside of it.

9. Parts of the Head. Top; hair; front or face: forehead, temples, eyes, cheeks, nose, mouth, chin; sides; ears; back; skull.

LOCATION OF PARTS OF THE HEAD. The *top* of the head is the highest part of the head and is called the *crown*. The

hair is for both protection and beauty. It covers the crown and back parts of the head and partly covers the sides of the head.

The *front* of the head is the face and consists of the forehead, temples, eyes, cheeks, nose, mouth and chin. The *forehead* is the upper part of the face, lying just above the eyes. The *temples* are two in number, forming the right and left sides of the forehead.

The *eyes* are two in number and are set directly below the forehead, a little to the right and to the left sides. The *cheeks* are two in number and occupy most of the right and left sides of the face. They cover the bony structure and add beauty to the shape of the face.

There is but one *nose* to each face. It lies below the forehead, between the eyes and between the cheeks. There is one *mouth*. It lies between the nose and the chin. The *chin* is the lowest portion of the face.

There are two *sides* to the head, the right side and the left side. These lie between the front of the head (or face) and the back. The *ears* are two in number, one joined to the right side and one joined to the left side of the head. The *back* of the head is all that part of the head not filled by the top, front and sides.

The *skull* is the bony part of the head that gives shape to all the rest. It is hollow and made of parts carefully joined together. We cannot see the skull, but can feel it. The skull protects all parts of the head to some extent, but especially guards the brain. The *brain* is a very delicate organ of the body, located in the hollow of the skull. It is by means of the brain that we are able to do our thinking.

10. The Eyes. (a) PARTS THAT PROTECT THE EYES. Sockets; brows; lids; lashes.

(b) THE LOCATION OF PROTECTIVE PARTS OF THE EYE. The *socket* is the hollow or bony framework in which the eye is placed. It protects the eye from injuries that might come from blows, collisions or other accidents. There are two sockets, one for each eye.

The *brows* are directly above the eyes. They are furnished with short, silky hair. The eyebrows add beauty to the face and protect the eyes by catching drops of perspiration, fine particles of dust and other minute substances that otherwise might fall into them and cause them to become inflamed and swollen.

The *eyelids* are four in number, two for each eye. They are called the upper and lower lids. These serve as curtains and help to regulate the amount of light admitted to the eye. They also protect the eye from sudden danger by dropping quickly over it in time of need.

The *eyelashes* are short, fine hairs attached to the edge of the eyelids. They turn upward on the upper lid and downward on the lower lid. They keep the edges of the eyelids from rubbing together and thus prevent soreness. They also guard the eye from dust, small insects and other things harmful to it.

(c) VISIBLE PARTS OF THE EYE. The visible parts of the eye are the eyeball, the iris and the pupil.

(d) LOCATION OF PARTS OF THE EYE. The *eyeball* is the ball-shaped portion of the eye. It is white, smooth and glistening and rests easily in the socket, held in place by muscles created for that especial duty. Children call the eyeball "the white of the eye."

The *iris* is the colored part of the eye. It is not always of the same color. When it is blue, we say the person has blue eyes. When the iris is gray, we say that person has gray eyes. And so for brown, hazel and black, the eyes in every case being named according to the color of the iris.

The *pupil* is in the center of the front part of the eyeball. It is an opening in the iris that admits light to the eye. It always looks black, because of what lies back of it inside the eye. The pupil is frequently called "the window of the eye," because it lets the light in.

(e) CARE OF THE EYE. Notwithstanding all the protective organs with which the eye is guarded, if a tiny cinder, particle of dust or some other irritating object gets into the

eye, it creates great pain and serious inflammation. In such cases the eye should never be rubbed, since that increases the trouble. Draw the upper lid out and as far down over the lower as possible and hold it there steadily. Tears will speedily form and, in most cases, will succeed in washing out the offending particle, after which the inflammation will subside.

It is because the eye is the organ of sight, and because without sight we could do little for our own comfort and pleasure or anything for others, because the eye is the most delicate of all the organs of the body, except, perhaps, the brain, and is so easily injured beyond hope of recovery, that all these natural protections have been given to the marvelous organ. The slightest irritation will cause intense pain, and it takes but a slight injury to the eye to destroy the sense of sight. Staring at the sun, staring into another's eyes at close range, reading or working in a dim or fading light, or with the sun shining strongly upon the work or reflected into the eye, "looking cross-eyed," holding a book too close to the eyes, and many other very common practices among children and thoughtless people, strain the eyes, weaken their power and, in time, permanently impair the vision.

Caution. Teachers should watch young pupils carefully and take steps at once to eradicate any of the faults enumerated above. They should also quietly and informally test the eyesight of the children and see that those whose eyes are weak, or near-sighted, are seated nearest the blackboard, to prevent eye strain and error in work. All writing, drawing, figures and work of any sort upon blackboard or charts should be large, clear and distinct.

It is not always possible or convenient to test the eyes of pupils in the first grade by the means of cards used by oculists. A very practical and convenient method is to place the pupil in the back part of the room, then draw a small square or circle on the blackboard; make the figure about two inches in diameter. Ask the child to look at

the figure, then erase it and ask the child to draw one like it. If he cannot do this, it is quite evident that he did not see the figure clearly.

11. The Nose. (a) THE PARTS OF THE NOSE. Bridge; sides; nostrils.

(b) LOCATION OF PARTS OF THE NOSE. The *bridge* is the center part of the nose, the firmest part. The shape of the nose is mainly determined by the shape of the bridge. The *sides* are the parts reaching from the bridge to the cheeks. The *nostrils* are two in number, one on each side of the bridge. These are openings to admit air in breathing and to give access to the nerves of smell. The walls of the nostrils are thin, flexible and delicate when of the best type for beauty and use.

For protection against particles of dust and other things, the nostrils are lined with short hairs which prevent these things from being inhaled with the breath.

The nose is the organ of smell and also the proper organ through which to take in air for the lungs. When the air is taken through the nostrils, as should be the case, it becomes slightly warmed while passing through the nose and fills the lungs without irritating them.

(c) CARE OF THE NOSE. In order that the sense of smell may remain keen and delicate and that breathing may be easy, the nostrils must be kept perfectly clean and free from obstructions of every sort.

12. The Mouth. (a) PARTS OF THE MOUTH. Lips; teeth; tongue; roof; palate.

(b) LOCATION OF PARTS OF THE MOUTH. The *lips* are two in number, called the upper and the lower lip. They form the doors to the mouth, and, when closed, the mouth is closed.

In the mouth the food is prepared for the stomach by being properly chewed. Before it can be swallowed safely it must be chewed to a pulp and well moistened with saliva.

There are thirty-two *teeth* in a full set, four of these being cut after childhood and early youth are passed. These

four are called "wisdom teeth" and are never found in a child's mouth.¹ The teeth have roots to hold them firmly in the jaw, and a hard, white coating, called enamel, to protect them from the air, heat, cold, etc. In the interior of each tooth are little nerves that are so sensitive that when the air touches them it causes toothache.

Very hot, very cold, very hard, very sour and very sweet things are liable to injure the enamel, hence must be used carefully. Never crack nuts or bite hard substances with the teeth. Particles of food left in the mouth are liable to cause the teeth to decay and render the breath foul; therefore, the teeth must be kept clean. Use a moderately stiff brush and clear water, brushing the teeth after each meal to remove all particles of food from between or around them.

The *tongue* is so attached that it can move freely and with great ease and flexibility. It is the chief organ of speech and the chief organ of the sense of taste. The sense of taste will be injured if food or drink excessively hot or excessively cold is used too freely. The sense of taste is in all parts of the mouth to some extent, but chiefly located in the tip of the tongue and in the palate. The *roof* is the upper part of the mouth; the *palate* is the soft conical body projecting downward at the back of the mouth.

The one who wishes fully to enjoy the taste of what he eats or drinks, eats slowly, daintily, in small mouthfuls and not overmuch at a time. The glutton soon destroys all the delicacy of his sense of taste, and therefore he loses the highest enjoyment that food can give. His sense of taste then ceases to warn him of the danger in unwholesome food.

13. The Ears. (a) PARTS OF THE EAR. Outer rim; lobe; drum.

(b) LOCATION OF PARTS. The *rim* is the edge of the outer ear. It assists in hearing, protects the opening from dust and other dangers and adds to the good looks of the face.

¹ At the time these early lessons are given, it may be that few children of the class will be found with the same number of teeth, this being the age in which most children are losing their first teeth and getting new ones.

The *lobe* is the lower end of the rim of the ear, more or less free from the head. It is sometimes so closely attached that it ceases to have any distinct form. Pulling the lobe of the ear gives intense pain and often causes harm beyond repair, therefore must never be done, even in sport.

The *drum* forms the partition between the outer and the inner parts of the ear. It transmits the sounds for the nerves of hearing. The drum is thin and delicate and easily broken. If, by accident or disease, the drum is broken, the sense of hearing is lost, and the person is then hopelessly deaf.

(e) CARE OF THE EAR. There is a waxy substance that nature has given the ear for its protection. This is commonly called the ear-wax, is yellow in color and very bitter to the taste. It serves to keep the drum from getting so dry as to crack, and keeps out insects. It is a mistake to remove every particle of this wax, although it should not be allowed to accumulate and harden, as that sometimes causes deafness. The sense of hearing is also destroyed if the drum be punctured with a pin or some other sharp-pointed object.

The ear is supplied with a group of small, delicate bones that assist in hearing. These bones are in the middle ear and cannot be seen. They are so small and so easily displaced that even a slight blow should never be given to the ear, much less a heavy one. "Boxing" the ears is dangerous in the extreme.

Sharp, sudden and very loud noises and continued blowing in the ears are also very harmful and every care should be taken in guarding against them. Things done "just for fun" have frequently resulted in lifelong injury to the ear.

The ears must be kept clean or the sense of hearing will be less acute. The way to clean them is by washing carefully with a soft cloth, using water not extremely hot nor extremely cold.

After cleansing, the ear should be carefully dried and then lightly and quickly rubbed in front and behind (one finger back of it and one in front) for a little time to quicken

the circulation and keep the nerves of hearing in an active condition. The ear should never be carelessly filled with soapy water nor should water be left inside.

14. The Finger Nails. The finger nails grow from beneath the skin not far from the ends of the back part of the fingers. The nails are without feeling, are thin, horny and transparent enough to show the blood beneath them.

The mission of the nails is to give more firmness and strength to the finger ends and to protect them from injuries. The ends of the fingers are supplied with numerous fine nerves which would often be injured and the sense of touch seriously impaired were it not for protection of the nails.

Neglecting to care for the nails properly is a very common habit, especially among school children and people who have many cares and duties crowding upon them.

This neglect causes untidiness, "hang-skins," "hang-nails," white blotches upon the nails and other unsightly results. All these things may be prevented by early training and a little thoughtful care.

The nails grow rapidly and need to be carefully filed off or trimmed as often as once a week, following the shape of the finger tip, to keep them in good form. They should never be "cut to the quick," but allowed to grow out even with the ends of the fingers in order to render the service designed. They should always be kept scrupulously clean, but no sharp instrument should be inserted beneath. A nail brush of medium hardness should be used when the hands are washed, and afterwards a proper nail cleaner may be used, if necessary.

When drying the hands, always rub around the nails, carefully pushing back the skin at the roots to prevent its encroaching upon and covering the "half-moon" that should show there.

These instructions, carefully followed, will prevent "hang-skins," "hang-nails" and soreness and give a wholesome and shapely appearance to the finger ends. When the nails seem too brittle and inclined to break or tear, a little

vaseline rubbed into them at night will materially reduce the trouble.

Nervous children often fall into the habit of biting the nails, causing much soreness and destroying the shapeliness of the finger ends. This habit also deadens, and in some cases destroys, the sense of touch in the finger tips.

It is not difficult to convince any one, young or old, that biting the nails is for all these reasons a very undesirable habit. Nevertheless, it is a habit difficult to cure. One of the best remedies is to stimulate the child's pride and encourage his effort by praising the improved appearance of the finger nails under the new regime. Never cease the encouragement till the bad habit has been crowded out and replaced by the proper care of the hands and nails.

In these lines, as in others relating to the care of the body, the teacher's example and sympathetic advice may result in lifelong good to her pupils, improving their personal appearance and removing many discomforts that grow out of ignorance and neglect.

When pupils have chapped hands, offer suggestions as to care, and some simple remedies, using a fitting time for the advice. Careless washing, strong soaps, imperfect drying and going out into the cold before the hands are entirely dry are the most common causes of chapped hands. Point out the causes first, then suggest the practice of washing the hands carefully, just before retiring each night. Dry the hands perfectly and thoroughly rub in a little mutton tallow, cold cream, or a lotion made of four parts of rose water to one of glycerine.

Caution. When giving lessons upon the hands, be sure that cleanliness is emphasized and encouraged by all proper means, example and precept united, but that no sarcasm is employed nor any person put to open shame.

15. The Skin. The skin is a tight, soft-fitting cover to the body. It consists of two parts. The outer layer is thin, without blood vessels, and in itself has little or no feeling. The inner layer of skin is full of small blood vessels, is very

delicate and very sensitive. The slightest scratch upon it causes pain.

When both skins are cut through, nature heals the hurt, but there is apt to be a scar. Illustrate this by showing a scar from a cut or burn, and by showing a garment that has been torn and mended.

The skin is a delicate, beautiful covering to the body; it gives off waste particles of matter through its thousands of pores, largely supplies the body with air needed for life, protects the flesh and blood under it against cold, and when entirely whole, clean and healthy, protects against infection, even when handling poisonous substances.

A good magnifying glass can be used to enable the class to understand the nature of the pores and to get some idea of their great number. Emphasize the need of keeping the skin perfectly clean in order that it may perform the duties intended. The pores must be kept open (clean) by bathing and brisk rubbing, or the air cannot enter, nor the waste, poisonous particles be carried off by the perspiration.

Explain, further, that without perfect cleanliness the body will give off a very disagreeable, offensive odor, that it will become unhealthy and liable to pimples, blotches, etc.

The skin needs plenty of fresh air and frequent exercise out of doors to keep it fresh and healthy. When a person stays too much indoors in over-heated rooms, the skin becomes dry and sallow.

The appearance of the skin covering the face is called one's complexion. To have a clear, fresh, beautiful complexion there must be entire cleanliness, plenty of fresh air, proper clothing (warm enough, but light in weight and loosely fitted), plenty of regular sleep and exercise, with simple, wholesome food and drink.

The following groups of lessons are suitable for third grade work, and should be extended by the addition of lessons on food and proper habits of eating and drinking.

16. Parts of the Neck and Trunk. (a) PARTS OF THE NECK. Throat; windpipe; back.

(b) **PARTS OF THE TRUNK.** Shoulders; breast; stomach; back; abdomen; hips.

Pupils locate, name and learn the uses of the above parts. This work will be general in character, since the details of this part of physiology must be left until higher grades are reached and pupils are better able to comprehend the difficult processes of digestion, blood circulation, blood purification and the like.

Dwell upon the work of the visible parts and do not try to make these lessons exhaustive.

17. The Limbs. (a) **PARTS OF UPPER LIMBS, OR ARMS.** Main arm; forearm; wrist; hand.

(b) **PARTS OF THE HAND.** Fingers, five, including thumb; finger nails; palm; back.

(c) **NAMES OF THE FINGERS.** Thumb; index finger; middle finger; ring finger; little finger.

(d) **PARTS OF THE FOOT.** Instep; toes; sole; ball; heel.

After teaching the location and name of each of the above parts, the most obvious uses may be taught; as, "The arms, wrists, hands and fingers enable us to reach, take up, hold and carry things, both large and small, if not too heavy for us to lift." "The legs, feet and toes enable us to walk, run, etc."

After these general uses are taught, it will be better to leave this group of lessons until after one or two lessons upon the joints.

18. The Joints. (a) **JOINTS OF UPPER LIMBS, OR ARMS.** Shoulders; elbows; wrists; knuckles; finger-joints.

(b) **JOINTS OF LOWER LIMBS, OR LEGS.** Hips; knees; ankles; toe-joints.

Teach location, name, number and use of each of the joints and care needed.

(c) **PLAN.** The joints may best be explained to little children as hinges. Sometimes they connect smaller parts to larger parts, sometimes two parts of about the same size. Be sure to bring out the fact that there could be no bending without the joints, and that their specific work is

to join parts of the body in such a way as to enable the body to bend in different directions and to take different positions. The structure and working of the joint will be made much clearer if the bones of a chicken leg can be used as an illustration. If the bones are not at hand, draw upon the board, or on manila paper, an illustration from some physiology. Make the drawing large enough for use with the entire class.

Emphasize the value and usefulness of joints by having the children try to do various things without bending the knees and elbows.

When the children have learned all that is at this time necessary concerning the joints and can readily locate and name each without assistance, the parts of the limbs may be reviewed, general uses recalled, and several lessons given to teach the more intricate uses of the hands and feet, and the special adaptation of the parts of each to their specific duties.

19. Hand and Foot. There should also be one lesson upon the marked difference between the hand and foot, as to location, size, shape, use, and adaptation to use. The facts to be included in this lesson are as follows: The hand is a part of the upper half of the body, placed at the end of the arm and in a line with it. It seems to be an extension of the arm, so to speak. The hand is thin and its palm may be bent to form a cup-like hollow, so as to hold things better. The palm ends in a row of four long, flexible fingers. The thumb is so arranged that it can be brought opposite any one of the four fingers, making it an easy matter to touch, pick up, grasp and hold any object not too large or too heavy.

The sense of touch is found in all parts of the body, but is very highly developed in the tips of the fingers, making it possible for us to pick up, adjust and work with the most delicate materials, and to use tools of fine quality and small size.

Compared with the hand, the foot is thick and stiff. The instep is arched, to give strength and flexibility in

walking. The ball of the foot is broad and flat, to give firmer support to the body in standing or walking. The five toes are arranged in one row and are shorter than the fingers and give far less aid to the sense of touch. The joints in the toes give an ease and elasticity to walking, running, jumping and other necessary movements.

Caution. Keep in mind that the purpose of these lessons will be lost if the teaching does not fill the child with a deep sense of gratitude for the wonderful house he has been given for his mind and soul to dwell in, and impress him with his responsibility for its proper care.

20. The Bones. A house built without a good, strong framework of sills, studding and rafters would soon fall. The bones form the framework of the body, as the timbers that are put up in building a house form its frame.

The long framework of our body is covered with muscles that move it about. This framework is made up of many bones, closely joined and fitted together. These bones make the body firm and strong and give it its shape.

(a) **PLAN.** Ask the class to find the bones of the arm, the forearm, hand and fingers. Call attention to the bones of the lower extremities and notice why they are larger than those of the arms. Proceed to the bones of the head and trunk. There will probably be enough physiologies in the school so that the pupils can have the use of a diagram of the skeleton. The structure of the bones can be seen by examining a beef bone. It is well to let the pupils examine it both before and after cooking, so that they can see what has been extracted by heat.

The names of the bones should be learned at this time.

(b) **BONES OF THE HEAD.** Face, fourteen, besides teeth; skull, eight; ear, three.

(c) **BONES OF THE TRUNK.** Spine and twenty-four ribs; breast-bone; collar-bone; pelvis, four.

(d) **BONES OF ARM AND HAND.** Upper arm, one; forearm, two; wrist, eight; hand, five; fingers, fourteen; twenty-eight in all.

(e) **BONES OF LEG AND FOOT.** Hip, one; thigh, one; below knee, two; knee-cap, one; ankle, seven; foot, five, toes, fourteen; thirty-one in all.

The above are all the bones of the body that are practicable to teach at this time, and all that can be accurately located without a skeleton.

Lessons on muscles may profitably follow those on bones.

21. The Blood. In the first lessons on the blood it can be compared to the juices of plants and the sap in trees. Teach its use in nourishing the body and carrying off waste tissue. Show that pure blood is essential to health and that this condition depends upon cleanliness, fresh air, exercise, proper food and drink, a necessary amount of sleep and proper clothing. The older pupils should study the veins, arteries, heart and circulation. Name and locate arteries, veins and capillaries, teaching the general difference in their functions, but avoid the use of technical terms.

It will be well to teach how to recognize when a vein or an artery is severed and what to do in such cases, pending the arrival of the nearest physician.

Lessons on the blood should be followed by those on respiration.

22. Waste and Repair. A series of very interesting and very valuable lessons may be given upon what agencies tend to create fatigue, wear and waste in the body and what agencies restore and rebuild it.

The body is like a great, busy workshop, where many kinds of labor are going on all the time, day and night, as long as life lasts. The machinery of this wonderful workshop is of many kinds and each part performs a curious and complex duty. All are necessary to the complete working, and perfect health is maintained only when each part performs its functions.

(a) **AGENCIES THAT WEAR AND WASTE.** Breathing; growing; working; running; walking; overeating; very high heels; unwholesome food; tobacco; alcoholic drinks; lack of sleep; lack of exercise; lack of ventilation; tight clothing;

disease; evil thoughts, envy, hate, jealousy, spite, greed; worry; uncleanness.

(b) AGENCIES THAT REPAIR AND REBUILD. Fresh air; sleep; wholesome food; pure water; pure milk; regularity of living; outdoor exercise; serenity; contentment; congenial work; kind thoughts; cleanliness; noble ambitions; high ideals.

23. Correlated Literature. Through the teaching of appropriate songs, maxims, poems and proverbs in connection with the lessons upon the human body, the vital truths of the latter will be more deeply impressed and much longer remembered than otherwise.

To illustrate. With the lessons upon the mouth, teach, "Keep thy tongue from evil and thy lips from speaking guile." Read the fairy story, *Diamonds and Toads*, telling of the little girl who opened her lips only to let venomous things come out. Teach, "Speech is silver, but silence is golden," and—

"If you your lips
Would keep from slips,
Five things observe with care:
Of whom you speak,
To whom you speak,
And how and when and where."

With the lessons upon the hands, teach the poem, *Beautiful Hands*; the action song, *Raise Your Hands if They are Clean*; the game, *Washing Hands*; the proverb, "Cleanliness is next to godliness"; the command, "Whatsoever thy hand findeth to do, do it with thy might," and Psalms xxiv, 3 and 4.

The above are sufficient to illustrate what is meant by the term "correlated literature," but words can scarcely express the value of such teaching given in the impressionable years of early childhood. A teacher possessing the mother heart will realize the need of such teaching and be diligent to find ways of accomplishing it.

24. Temperance Physiology. That there is need of giving lessons in temperance to all children requires no argument. It is self-evident. Unhappily, abundant proof

of the evil results of intemperance is on every side, not even the country districts being exempt.

The need of temperance lessons is so apparent that many countries have enacted positive laws requiring such teaching in all the schools of the country. It is unfortunate that those laws usually specify "alcohol and tobacco," but omit opium, cocaine, absinthe, profanity, obscenity, impurity, gluttony, luxurious and idle habits and many other things that militate so strongly against temperate living in its highest and best sense.

It is sad, but true, that temperance teaching measured by results has been almost a total failure in most schools. Even in schools where the evil effects of alcohol and tobacco have been demonstrated by every scientific experiment that could be used in the schoolroom, the result has not been satisfactory. The teachers have done their duty as they understood it and carried out the law to the best of their ability. These failures are due largely to a failure in appreciating when, where and how temperance teaching should begin and to a lack of knowledge of the real foundations of this work.

No teaching of temperance physiology that is based only on "scientific temperance" has ever produced entirely satisfactory results.

The teaching of temperance requires the greatest tact in order to secure the most desirable results. Children imitate those they love and in whom they have confidence. Your own personal attitude against the use of alcoholic drinks (including beers), and against the use of tobacco, is perhaps the most potent factor in temperance instruction. As a rule, it is better to emphasize what *to do* than what *not to do*. Children are more benefited by positive than by negative instruction. Lay more and more stress upon the joy of possessing a body strong in limb, rich in clean blood, steady in nerve and clear in brain, needing no stimulant other than pure air, wholesome food, regular exercise and invigorating sunshine.

Briefly stated, this teaching, to be truly successful, must rest upon a foundation composed of high ideals, self-control, self-respect and a genuine love of what is right, clean and pure in life, both private and public. Cement these elements solidly together in the character of a child and we shall have a foundation that will be able to resist the assaults of all temptations.

The work should begin in the home when the child is an infant, with mother, father, brothers and sisters to teach by precept, and more by example, habits of absolute obedience, regularity in eating, drinking, sleeping—thus laying the foundations of self-control and the recognition of proper authority. In the home, too, the child should learn lessons of abstinence in sweets, in eating and in drinking, and should never form the habits of vulgarity, gormandizing and gluttony, or intemperance in any respect.

From the day the child enters the primary school until he leaves school forever, the teachers should see to it that the will power is strengthened, not broken; that self respect is fostered by every means possible; that right conduct is kept ever uppermost; that worthy motives and ambitions are implanted through examples chosen from life, from biography and from history, by means of fables, anecdotes, maxims, proverbs and poems.

This work forms the strong, sure substratum upon which "scientific temperance teaching" will rest securely and permanently. It is most successful when the teacher works persistently, patiently and skilfully, letting the pupils learn her purpose inferentially. Loud and frequent declarations of intention nearly always destroy success in advance.

There is little or no place in the primary grades for direct "scientific temperance teaching," since that requires explanations, reasons and demonstrations beyond the full comprehension of the classes. When such work is attempted too soon, children are liable to misapprehend and carry home such garbled versions of what the teacher does and says that antagonism is aroused and defeat follows.

Mothers may give children a tendency towards intemperance by giving them too much animal food in early years, and by giving them highly seasoned foods. It is very important that the body be kept strong throughout childhood and youth by good food and vigorous exercise.

When intoxicated people are seen, or when men appear with cigarets, cigars or pipes; when one is seen crazed by cocaine or stupefied with opium, the children have recognized the illustration, and a few words then and there, if fitly spoken, will have deep and lasting effect for good.

Impressions sink deeply into childish hearts. A boy's will may, indeed, be the wind's will, but "the thoughts of youth are long, long thoughts." Therefore, use no words of sarcasm, ridicule or contempt, neither permit them to be used, when intemperance of any kind is seen. Lower the voice, speak words of pity and words of deep, sincere regret, and show how much more such persons would be respected if these things were not. Speak gently, and do not say too much.

TEST QUESTIONS

1. Why are lessons on hygiene needed in the first grade?
2. Why does the teacher need a thorough preparation for teaching physiology in the primary grades? What can the teacher do by herself to obtain this preparation?
3. Would you give the same lessons to the primary grades in a rural school and to a city primary school? If not, wherein should they differ, and why?
4. Show how children's play is beneficial to their state of health.
5. In what respects should lessons given pupils in the third grade differ from those given in first and second grades? Outline a lesson on the joints of the arm and hand, such as you would give a third grade class.
6. What is gained by correlating physiology with other branches? Give a specific illustration.

7. What dangers arise from the use of common things to illustrate anatomical and physiological facts, such as referring to the joints as hinges, the heart as a pump, etc.? How can such dangers be avoided without omitting the illustrations?

8. How would you show your pupils that such acts as walking, running and breathing lead to waste of tissue? What illustrations can you give of the repair that the system is constantly undergoing?

9. What are the requirements of the law in your state relating to the teaching of physiology? What difficulties do you have in meeting these requirements?

10. Which is of the greater importance and why, instruction concerning the effects of stimulants and narcotics upon the human system, or training of the will? Give reasons for your statement.

CHAPTER SIX

MUSIC

1. The Aim of Music in the Public Schools. Public school music has suffered from a misapprehension, on the part of the general public and most teachers, of its aims and possibilities. Music has been looked upon as an accomplishment for the talented, and its study has been confined to those who displayed unusual ability or taste in that direction. This is no more reasonable than to say that because a child does not show evidences of becoming a great mathematician he should not study arithmetic.

Music has great educational value. Probably no one would deny its value as a culture study, but not all appreciate that in addition there is no other subject in the school curriculum more useful in training the senses and in mental discipline. Properly taught, music trains the ear, the eye, the voice and the hand, and furnishes the best kind of exercise for the intellect. It is not the aim of public school music to turn out *musicians*, but to make appreciative listeners, to open up a world of esthetic enjoyment and culture for those who otherwise would never know this pleasure, and to arouse and strengthen a taste for good music and to cultivate the powers of the pupils to interpret good music.

There is a certain fundamental knowledge of music that everyone can acquire. Any teacher who can teach reading can teach music, even if her knowledge of the subject is limited—provided always that she is willing to make the necessary effort. She should be able to sing the scale correctly, she should be able to detect inaccurate tones and she should have some knowledge of music notation. Given these, plus a willingness to apply herself to the task in hand, she can begin the teaching of music and will find herself growing in power as the children advance.

2. Material. The teacher should provide herself with a pitch-pipe (the Congdon chromatic pitch-pipe is the best¹) and a blackboard staff liner.² She should have a plentiful supply of rote songs, among the best collections of which are the *Songs of the Child World*, by Jessie L. Gaynor, and *Songs and Games for Little Ones*, by Mildred and Pattie Hill. (See Section 13.) A careful study and use of the music course authorized in your province will give the greatest possible help in the beginning. Later, a book that will furnish material for practice is necessary for the pupils. For this purpose the *Harmonic Primer* by Ripley and Tapper is among the best. Charts, too, are necessary for the same purpose. If the board will not furnish them, the teacher can obtain the charts in pamphlet form and put the exercises on the board.

3. Care of the Children's Voices. It is of the utmost importance that the teacher understand how to take care of the children's voices. This does not mean that she must give a course in voice culture, but it does mean that she should know how to preserve the natural voices of the children.

(a) **RULES.** There are a few simple rules, which, if followed, will be very effective.

(1) First, remember that there is much more danger of singing too low than of singing too high. A child's voice is naturally high and clear and ought to be sweet rather than shrill. To preserve this child quality, everything should be sung in a high pitch. It is a good general rule to have the songs and exercises lie within the compass of the staff; that is, not below *e*, first line, or above *f*, fifth line, although the voices can be carried higher than *f*, and they can go lower than *e* if they start high and sing down and back. Many of the rote songs should be pitched higher than they are written. This may not be comfortable for

¹ Lyon & Healy, 202 S. Wabash Avenue, Chicago, or any music store, will furnish this. The price is about 15 cents.

² A good staff liner may be secured from any school supply company for about 20 cents.

the teacher unless she happens to be blessed with a high soprano voice, but she must remember that the children are to do the singing. While she is teaching the rote song she can pitch it for her own voice, but when the children have learned the melody, it must be pitched for their voices. The teacher should not sing *with* the pupils after they have learned the song.

(2) In teaching the scale, start with high *do* and sing down and up. In all vocal and scale drills follow the same rule.

(3) Have the pupils sing the scale with the syllables *loo* and *coo*, both of which give a sweet, smooth tone.

(4) In pronouncing words, as also in giving the scale syllables, dwell on the vowel sounds and not upon the consonants.

(b) SUGGESTIONS. (1) More can be done for the voices of children in singing songs than in any other way, for here we have the *emotional* interpretation, of which more will be said under the head of *Rote Songs*.

(2) Never allow the children to *shout*. Work for a clear, light, sweet tone, not for volume. It is better to say to the children, "sing sweetly" or "sing lightly," rather than always "sing softly." Just to say "softly" sometimes cultivates a suppressed, dead tone. What we want is a vital tone, without harshness. Insist that everything, whether it be a scale drill, sight reading exercise or song, be given with this good tone. This brings better results than many vocal drills.

4. General Principles of Methods. Music is a language, and teaching music, in process, is much like teaching a child to use and read his "mother tongue." There is this difference for the teacher, however: A child comes to school with a certain vocabulary of words. He can talk. He has ideas which he can express in spoken language. He has no vocabulary of tones. The teacher must do for him in music what the mother and his brothers and sisters have done in the use of words. She must furnish the vocabulary.

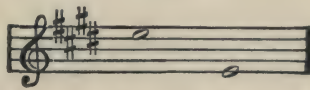
She must lead him to express himself in tones. This power he acquires by imitation. When he can imitate he must learn to recognize what he hears. When he can hear tones and recognize them he is ready for a written representation of them, or what we call music notation. The final step is the interpretation of the written signs—or reading music—commonly termed sight reading. The steps in methods, then, are imitation, recognition, representation and interpretation.

6. Imitation. (a) **THE ROTE SONG.** The rote song, or song to be taught by imitation, is the foundation of music study. By means of it a child's musical sensibilities are aroused, his feeling for melody and rhythm awakened. The songs should be selected with care, that they be within the child's voice range, that the melody is simple and the rhythm well marked. Care must be taken, too, to select songs having the right kind of words. Mere doggerel will not do. The poem should be good, as a poem, without the music. It should be something that appeals to the child, either to his experience or his imagination. Children like fanciful things, and even nonsense verses. The songs may be selected to correlate with the nature study, the geography, the study of trades and industries, etc. There are many beautiful songs of the seasons. In this way the music may enrich all the other subjects and stimulate the child's interest in everything.

In presenting the song it is well to lead up to it by means of some informal conversation or a story, but do not insult the children's intelligence by an elaborate introduction to something with which they are perfectly familiar. When they are interested in what the song has to say, sing the entire song, so that they will have the whole story. Then sing the first stanza, or the whole song, several times, until the melody is fairly well fixed. After that, take it phrase by phrase, having the children sing each phrase after it is sung by the teacher, until the entire song is memorized. Songs may be taught by rote just as long as the songs you want the children to sing are beyond their ability to read.

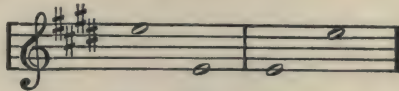
Caution. Do not make the mistake of teaching too many songs. Children love to sing the same things over and over. More than that, the song should always be sung with the same thoughtful interpretation given it at the first rendering. If this is done, you will find there is a limit to the number of songs they can master.

(b) **UNITING THE VOICES.** While the class as a whole will be able to learn the songs in the manner described above, there will be many little voices that will waver from the tune and probably only a very few that can carry the tune alone. It is therefore necessary to carry on another line of work parallel to this song singing. The first step in this more definite study is to unite the voices on a single tone. Let the teacher sing any tone (as C, third space; D, fourth line) with any syllable—do, loo, koo, no—and have the children imitate the sound. Hold it until all the wavering tones unite on the correct pitch. Then try another tone. When they can imitate the one tone correctly, give them two tones, an octave apart; as,

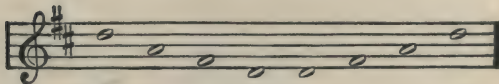


Do do

Then give them groups of tones—anything that suggests itself to you—like sol, do, mi; do, mi, sol; sol, la, ti, do; do, re, ti, do; do, mi, sol, do, remembering always to keep the pitch high. Make the exercise a play and call the children by name in tune; for instance,



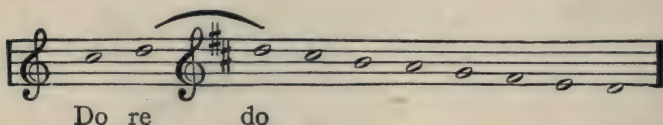
Car - rie, Ma - ry.



How do you do? I'm ver - y well.

And so on. Use ingenuity in making up different combinations, but do not keep it up too long. The whole object of the exercise is to develop the power to hear accurately and imitate exactly. Have each one try alone. Individual work should be emphasized throughout the music course. Next teach the scale as a melody, beginning on high do. This may be taught first as a little song (see scale songs in *Rote Song Book*), then with *loo*, then with the syllables, do, ti, la, sol, fa, mi, re, do; ascending, do, re, mi, fa, sol, la, ti, do. Drill on the scale tones until they are very familiar, but do not keep the children at that kind of work more than four or five minutes at a time. All drill should be given with absolute attention and concentration and with children this cannot be sustained long.

When the pupils can sing the scale with the syllables, have them sing it in different keys and practice changing from one key to another. Have them sing the high do and the re above, hold this tone (re) and call it do, then sing down the scale. In staff notation the exercise is this:



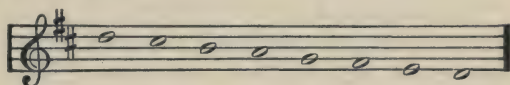
You will probably have to show them how to do this the first time, but they soon master it. When they have done so, a great point is gained; for all the work in modulation and changing of key—as well as much of the drill in chromatics and minor—depends on their ability to do just this thing.

Taking C for the starting point every time, have the pupils sing do, re, mi; change mi to do, and then sing down the scale. Let them sing down to sol; change sol to do. Once they have the idea the exercise is very simple.

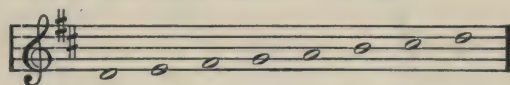
6. Recognition of Tone. To hear and to imitate is only the first step toward the mastery of a language. In music, the pupils must be led to discriminate between tones and

to recognize what they hear. Let the teacher hum, or sing with loo, the first phrase of any song which the children know and see if they can give her the correct words. Later, she may select any phrase in a song and see if it is recognized. This can always be made an interesting game.

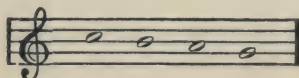
Leading to more definite tone recognition, the teacher sings the scale, thus:



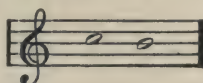
saying, "This is the scale down." Then,



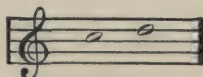
"This is the scale up." Then sing or hum three or four tones; as,



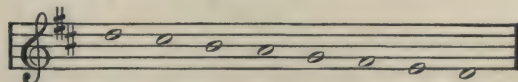
and ask the children if the voice goes up or down. Continue that practice with various exercises until they can always tell whether the progression is upward or downward. Try them with just two tones and see if they can tell which is high and which low. Begin with a large interval, like the octave. When they can tell that



is down, and

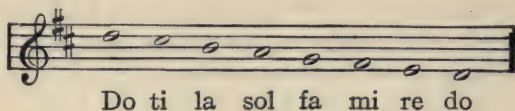


is up, a distinct point is gained. Then sing

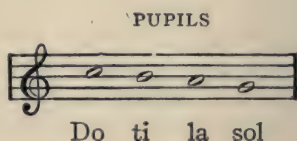
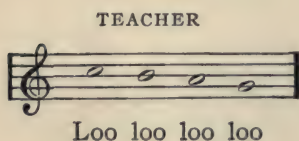


Loo loo loo loo loo loo loo loo

and ask the children to give the syllable names. They will sing back,

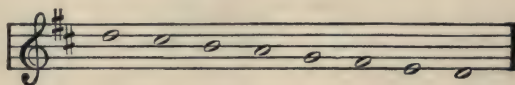


Then sing or hum various combinations, the pupils replying with syllable names; as,



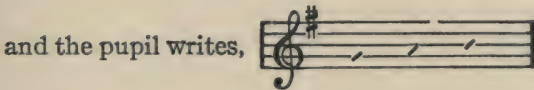
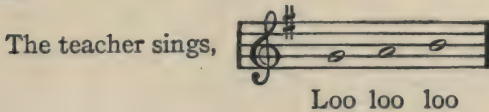
These exercises should be progressive, easily so, gradually increasing the number of tones and the difficulty of the combination. A good series may be found in the *Rote Song Book*.

7. Representation of Tone. When the children have gained considerable facility in recognizing tone, they are ready for some representation of it. As the staff notation is the one they will always have to read, it is the best to give it from the start. So let the teacher draw the staff, and place the clef and key signature. Have the children sing the scale and then say to them, "This is the way we write it:"



Have the children practice putting the notes of the scale in different positions, the teacher making the staff, placing clef and key signature, telling the pupils where to place do. Then sing or hum the same simple exercises that have already been used in training them in recognition. Have the pupils sing the exercises back to you with the syllables, and as they sing them write the notes on the staff. Do not have them take the

time to make the round notes, but let them *write* the music thus:



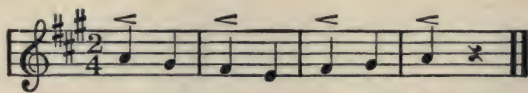
He can make these little straight lines as he sings the tones and afterwards can make them into round notes, if desired. That is not essential. It is very easy to change these marks (—) to quarter notes by adding a stem (┘┘), or to eighth notes by adding stem and flag (┘┘). What we are working for here is location of pitch on the staff, and it is not wise to give the children too many things to think about at one time. This recognition of tone is the most practical ear training; the writing trains both hand and eye.

The exercises should increase in difficulty as rapidly as possible, consistent with accuracy. It is better always to begin the drill with the simpler combinations, for some of the children are much slower than others and cannot hear many tones. All the principles of sense training will apply to this work, for the proper study of music is essentially a training of the senses.

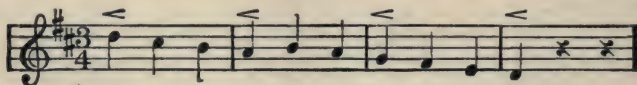
Music notation should mean for the child only the written representation of what he hears, either in audible sound or in his "mind's ear." If this order, recognition, then representation, is followed, much of what has seemed difficult in music teaching will disappear. There has in the past been too much study of signs and not enough study of the things for which the signs stand, just as in reading there was too much study of words and not of the ideas they represent. The things or ideas with which music deals are tones and combinations of tones, and the avenue by which they reach the mind is the auditory nerve; hence, the importance of hearing before

attempting to read. The ability to hear with the mind's ear is as important as to see with the mind's eye.

8. Recognition of Rhythm. There are two elements in music; they are tone, or tune, and rhythm. In the rote song the child has experience with both. In fact, all music, even the simplest exercise, must combine the two elements. In the exercises given above the teacher supplies the rhythmical element in her singing of the little tunes and she should always be careful to sing them rhythmically as tunes, not as detached tones. One tone by itself has no meaning. In the rote song the children have learned to feel the measure—the two-beat, three-beat and four-beat measure—and to feel the swing and movement of the music. Now we must bring this into simple form for them to recognize it definitely. The teacher should sing any little exercise like



with a very marked accent on the first note in each measure. Let the children clap their hands for the beats, a loud clap for the accented beat, a soft one for the unaccented. Let them make circles in the air, a large one for the accented beat and a small one for the unaccented. Do the same thing with an exercise having three beats to a measure; as,

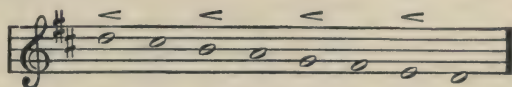


and with four beats; as,

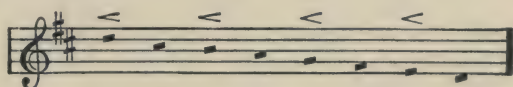


Sing any tune that you happen to know with a marked accent and then have them discover the number of beats in a measure. This can be made a very interesting exercise, but do not keep it up beyond the point of usefulness.

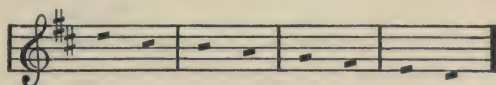
9. Representation of Rhythm. Sing the scale with accent, as follows:



Write as you sing it:



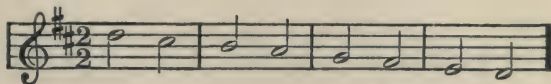
Then tell the pupils you will put a *bar* before the note that has the accent. There is already a bar at the beginning of the staff, so the first one comes just before the third note. Sing the exercise through again, putting the bar in the proper place as you sing, and a *double bar* at the end, and you have this notation:



Then make the notes quarters, by adding the stem. Sing the exercise as you put in the stems. Then place the meter signature, $\frac{2}{4}$, and you have the complete exercise:



Or, you can make them half notes and the signature will be $\frac{2}{2}$; as,

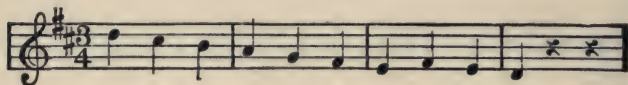


Whole notes will give the signature $\frac{4}{4}$.

Let the pupils know at once that the upper figure of the meter signature shows the number of beats in a measure and the lower figure shows what kind of a note receives one beat. After this let the exercise combine tone and

rhythm, except the more difficult tone combinations, following the above process.

For instance, the teacher sings,



The pupils sing and write as they sing, the teacher drawing the staff and placing the clef and the key signature.



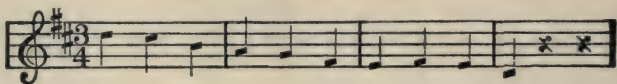
Then sing it again, this time the pupils putting in the bars; as,



Again they sing it, putting the stem to the notes; as,



After this the pupils may determine what the meter signature will be. It is $\frac{3}{4}$, which is put in its proper place, and they have this complete little melody:



This shows the process of recognition and the representation of what is heard, and this same process should be carried throughout the entire music course, both for the presentation of all new points and for the frequent practice in ear training. An easily progressive series of exercises in both tone and rhythm will be found in the *Rote Song Book*.

10. Interpretation. (a) DEFINITION. *Interpretation* is the translation of the printed symbols into vocal language.

The only difference between interpretation in ordinary reading and in music is that in reading we translate the printed into the spoken word, while in music we translate the symbols and the accompanying words into song. This is what is meant by "reading music." It is commonly called *sight reading*, and is the last step in the process of interpreting the printed signs.

(b) METHODS. (1) *Variety*. There is no reason why a pupil should not read a page of his music primer or reader as readily as he does his English primer. The secret of both is in much practice. When pupils have a certain vocabulary of words, the teacher does not spend all her time in the effort to increase this vocabulary. What she does is to give the class many combinations of these same words. Each sentence is read in a manner to express the idea embodied, and not as a mere calling of words. The same sentence is not repeated until it is committed to memory, for this is not reading, but the same words are arranged in different expressions. The same principles must be applied to the reading of music. When the pupils can read a simple exercise made up of the consecutive scale tones—that is, having no skips—he should not at once be put on something more difficult, but should have many exercises of the same grade.

(2) *Rhythm*. There should be many exercises containing only consecutive tones in different keys before rhythm is introduced into the reading, then many exercises in consecutive tones and the simplest rhythms in different keys and meters. There should be some drill on skips without meter signature, then many reading exercises in different keys containing skips and with simple rhythm. The music reading should be done in the same manner as the English reading. Have the pupil look the exercise through from the beginning to the end to see what is the musical idea, then let him sing it as a complete sentence or phrase. Form the habit of reading the exercise or song through to the end at the first trial, for reading at first sight is largely a matter

of habit. Even if there is an error, it is better to go on to the end and then correct the error in that exercise or call the pupils' attention to it and give them another exercise containing the same point.

(3) *Tempo*. Cultivate the habit of reading the exercise in good tempo. Do not let the pupils think because the exercise is new it must be taken very slowly. That is not reading; it is only picking out the notes. To read is to give the correct tone with the correct time to each, and at a good rate of speed. You will find that the rhythm often carries the class along and helps over some difficult places. Be sure to have the accent marked and the tone good. In other words, make the reading of every exercise, no matter how simple, the interpretation of the writer's thought. The artistic rendering of a song is nothing more nor less than carrying out this principle.

(4) *Expression*. A song is a poem in a musical setting. If the music is well written, it expresses in tones what the poem expresses in words. The two together should give a fuller and more beautiful expression than either alone. Be sure that the children understand what the poem means, and that in singing the song they are to tell with their voices all that the poet and the composer meant to tell. Have the pronunciation and the enunciation clear, dwell on the vowel sounds rather than on the consonants and have the tones well forward; that is, have them think of the tones as on the lips. Have them feel that they are singing to you, that they are telling the thought or story to some one. This will bring a vital tone. It is this sympathetic quality that pleases when we hear it, although we may not know what it is. Without it, the most perfect voice and most perfect vocal technique is cold and fails to touch our hearts. When endowed with the sympathetic quality, and only then, does music have its full meaning.

11. Order of Development. (a) THE NATURAL PROCESS. This lesson is planned to cover the work that should be accomplished in the first three grades of an eight-grade

school, when the subject is well established and the pupils are quite up to grade. The order of development would be the same wherever the subject is introduced for the first time. The method would be the same, except that with older pupils much less time would be given to the imitation period, while recognition, representation and interpretation would progress almost simultaneously. The process is as follows:

1. Rote songs for primary pupils have already been discussed. With older pupils the singing of songs learned by imitation will serve several purposes. By careful interpretation of the songs the voices are brought into tune, and music is made to have a new meaning. There is no better way to inspire patriotism than to sing our national songs in a manner to express all that the poets and composers felt when writing them. The singing of such songs as *Old Folks at Home* and *My Old Kentucky Home* will do wonders toward strengthening the home feeling. Much of national character and history can be brought out by such songs as *Auld Lang Syne*, *Blue Bells of Scotland*, *Gayly the Troubadour*, *The Harp that Once thro' Tara's Halls*, *The Alpine Horn*, and others of the same kind. In this way, from the start, music can serve to enrich the study of history, literature and nature. It can broaden and deepen the pupils' sympathies and add vastly to their appreciation of the good and the beautiful. It serves an excellent social purpose, for in no other exercise is it so necessary for each one to work for the good of all. In chorus singing one voice out of tune can spoil the whole performance. Accordingly, the rote songs for older pupils should be selected from the best of our old and familiar songs. Another point in favor of these songs is that there will usually be some pupils in the class who already know them, and these can help the teacher.

2. Voices united in single tones by imitation.

3. The scale learned as a melody. With older pupils, the scale should be represented in different keys as soon as they can sing it.

4. The recognition of tones of the scale when sung by the teacher to some neutral syllable, as loo, koo, hm, etc.

5. Writing of the tones recognized.

6. The reading of exercises of the same character. With older pupils these three points (4, 5 and 6) can be taken in one lesson.

7. As soon as a certain facility is gained in recognition of tone, the element of rhythm is added.

(b) SYLLABUS FOR FIRST THREE YEARS. Keeping in mind this method of presenting every new point, first through the ear, the order of development would be as follows:

(1) *First Year. The Scale.* Exercises in consecutive tones; that is, without skips.

Exercises in simple rhythms without skips, say in $\frac{2}{4}$ and $\frac{3}{4}$ or $\frac{1}{2}$ and $\frac{3}{4}$ meters.

Exercises with skips. This brings about the study of the individual tones of the scales and gives the power to come back to any particular tone from any other tone. First study upper do. Have the pupils sing do-ti, ti-do, dwelling a little on ti. Then do-ti-la and repeating la, sing la-do, and so on. Do-ti-la-sol; sol-do; do-ti-la-sol-fa, fa-do; do-ti-la-sol-fa-mi, mi-do; do-ti-la-sol-fa-mi-re, re-do; do-ti-la-sol-fa-mi-re-do', do,-do'; (high do is represented thus—do'; and low do, do,). Then study lower do in the same way. Give this in the key of D or E; do,-re; re-do,, do,-re-mi, mi-do,, etc. Next study sol, taking it in the key of F or G, and the exercises will be do,-re-mi-fa-sol, sol-fa, fa-sol; sol-fa-mi, mi-sol; sol-fa-mi-re, re-sol; sol-fa-mi-re-do,, do-sol; do,-ti-la-sol; sol-la, la-sol; sol-la-ti, ti-sol; sol-la-ti-do', do-sol. Next study fa; then ti. All of these should be put upon the staff, the teacher singing, the pupils recognizing and writing. If she has a chart, these drills will be found printed in full, so that by using the pointer she can give a rapid drill in using the various skips. Then the pupils should read some exercises in simple rhythm containing some of the easier skips. Nothing is said in these

grades about keys; the teacher tells the pupil where to find do.

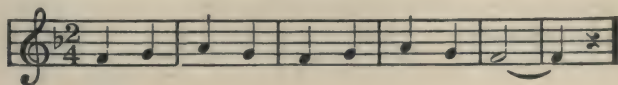
(2) *Second Year.* Review of first year's work.

Study of the remaining tones of the scale, which are mi, re and la. The pupils should have many opportunities in this grade to read simple exercises. By this we mean exercises in simple rhythm, containing no skips.

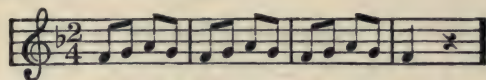
During the year all the common meter signatures should be introduced, $\frac{2}{2}$, $\frac{3}{2}$, $\frac{3}{4}$, $\frac{4}{4}$, $\frac{3}{8}$, $\frac{4}{8}$, $\frac{6}{8}$. The only variation or difficulty in rhythm should be the use of the short note and the long note. The short note receives one beat, or count, the long one receives two or more beats. For instance, with a meter signature of $\frac{3}{2}$, the exercise will contain half notes and whole notes; with $\frac{3}{4}$ there will be quarter notes and half notes, and so on. Remember these exercises should be in various keys, and during the year the pupils' attention should be called to the key signatures as a means of determining the position of do on the staff. No effort should be made to teach *keys*. What we are working for is facility in reading simple exercises, not theoretic knowledge. For the sight reading practice, the pupils should have a book of graded exercises and songs. With little children, the rote songs should be continued and about one-half the music should be given to singing of songs.

(3) *Third Year.* Review what has been done in the first and second years. This does not mean that you should go over the same material. It means that the pupils must read many exercises embodying the principles previously taught and not containing new difficulties. This is what makes quick, ready readers.

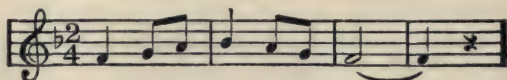
The new points presented in the third year are the divided beat and the chromatics, sharp four and flat seven. To present the divided beat, let the teacher first sing,



with a decided accent, and have the pupils tell the number of beats in a measure, also the number of tones to one beat. Write it on the blackboard. Then the teacher should sing, beating time while she sings,



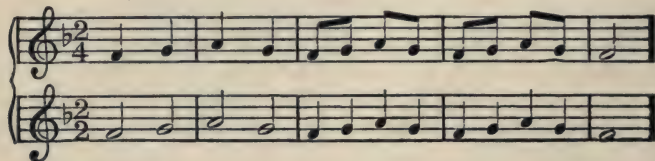
It may be necessary to repeat this several times before they hear two tones to a beat; when they have heard the phrase, write it on the board, as above. Then take various combinations of divided and undivided beats; as,



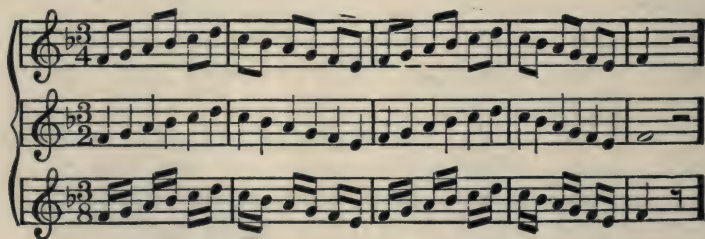
and



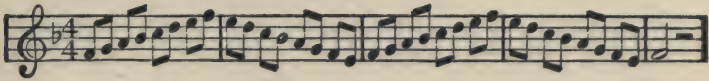
This is the rhythmical problem and during the year should be worked out in all of the different meters, $\frac{2}{4}$, $\frac{3}{4}$, $\frac{3}{8}$, $\frac{4}{4}$, $\frac{5}{4}$. The divided beat, or $\frac{3}{2}$ meter, can be taught by comparison with $\frac{3}{4}$; as,



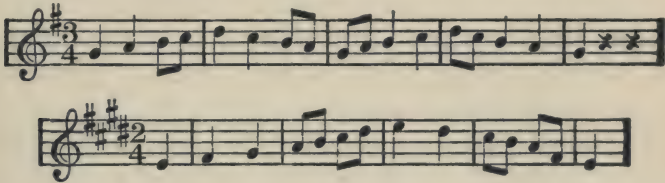
Then $\frac{3}{4}$, $\frac{3}{2}$ and $\frac{3}{8}$:



Then:

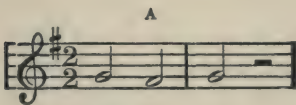


The children must hear and recognize various combinations of divided and undivided beats in different meters and write what they hear; as,

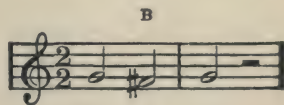


In presenting a new point in rhythm there should be no difficulty in tone. So in presenting new problems in tone all difficulties in rhythm should be dropped. In other words, present one thing at a time and give the necessary drill and many applications in sight reading exercises and songs before combining it with another new problem.

The new tonal problem in the third year is the introduction of chromatics. Sharp four, being the most commonly used chromatic tone, is the first to be presented, and it is introduced by comparison with something already familiar, and in the following manner. The pupils sing exercise A,



Do ti do



Sol fi sol

first with do-ti-do, then with loo-loo-loo. Exercise B sounds just the same and is first sung with loo-loo-loo, then with the syllables, sol-fi-sol. For drill this is worked out in various keys. For instance,

Do ti do Sol fi sol

Do ti do Sol fi sol

Do ti do Sol fi sol

Do not expect to master the rhythmic problem before presenting the chromatic, but do not present them in the same exercise before each one is well mastered. Keep the rhythmic and tonal problems advancing on parallel lines until they can be combined. At the same time keep up the practice of reading exercises containing skips without chromatics and various rhythms without the divided beat.

To accomplish results it is necessary to put into the hands of the pupils a properly graded series of exercises and songs, suggestions for which are given at the end of this lesson.

12. General Suggestions. The various phases of the music work must progress evenly. Do not allow the pupils to become weak in any line. If they have difficulty with time, give them additional rhythmical exercises. If they keep good time and are weak in the matter of tone, strengthen that part of the work.

It is well for the teacher to have in mind a general program or order for each recitation, such as the following:

1. Vocal drill.
2. Ear training; oral, written.
3. General chart or blackboard drill.
4. Drill on special point.
5. Sight reading.
6. Songs.

It is not possible to take up every point in each recitation, but with such a plan in mind, no phase of the subject will be neglected.

Before you begin the lesson, have it definitely settled in your own mind what points you mean to touch and just how much time you mean to give each.

Have a definite end in view for each recitation and make every part of the lesson contribute to the accomplishment of this end. Make every minute count.

Remember that in the study of music we work for skill, for facility in doing. Do not waste time in talking *about* things, but keep the pupils *doing* something. Dr. E. E. White says, "The desire for efficiency in *action* is one of the strongest impulses of childhood."

All drill should be for a definite purpose. Drill on principles or typical forms. Drill is effective only when there is interested attention and concentration on the part of the class. It should not be carried to the point of weariness. When possible, there should be an application of the principle in a sight reading exercise before leaving the lesson.

Have a happy spirit in the music period. You cannot scold children into singing; but remember that a smiling countenance helps in the production of good tones.

13. Helpful Books for Teachers. (a) PRIMARY ROTE SONGS. *Songs of the Child World*. Jessie L. Gaynor. 2 vols. John Church Company, Cincinnati.

Songs and Games for Little Ones. Walker and Jenks. Oliver Ditson & Co., Boston.

Songs and Games for Little Ones. Mildred and Pattie Hill. Clayton F. Summy & Co., Chicago.

A Primer of Vocal Music. Eleanor Smith. (Modern Music Series.) Silver, Burdett & Co., Chicago.

(b) FIRST STEPS IN MUSIC TRAINING. *Rote Song Book: First Steps in Music*. Ripley and Tapper. American Book Company.

(c) GRADED MUSIC COURSES. *American Music Reader*, No. 1. Macmillan Company.

A Common School Book of Vocal Music. R. Foresman, Editor. Silver, Burdett & Co.

Harmonic Primer, Natural Music Course. American Book Company.

New First Music Reader, Educational Music Course. Ginn & Co.

Novello Music Primer. Novello, Ewer & Co., New York.

(d) FOR MIXED GRADES. *Common School Song Reader.* Ginn & Co.

Short Course in Music. Ripley & Tapper. Books I and II. American Book Company.

(e) CHARTS. *Natural Music Charts, Series A, B, C.* American Book Company.

Be sure to get a set of the music books authorized by the education department of your own province, and ask your superintendent or inspector to recommend others.

TEST QUESTIONS

1. What is the value of music as a public school study?
2. How can injury to the children's voices be prevented? What is the best means for securing a "vital tone?"
3. What subject is analogous to music in the method of presentation? How many and what are the steps to the general method?
4. What is the value of the rote song? When and how long should it be used?
5. How would you select and present a rote song?
6. Will all children be able to learn a song without preliminary work? How would you teach the scale?
7. Describe a lesson in *recognition*. What two elements have to be considered in music?
8. Describe a lesson in *representation*.
9. What is meant by *interpretation*? Does this apply to songs alone?
10. How would you modify this method for adult pupils?

CHAPTER SEVEN

THE USE OF THE SENSES

1. Function of the Senses. The child gets all his primary ideas of the external world through the use of his senses. Upon the activity of the senses which bring the child into contact with the world all mental action is based. The things of the external world impinge upon highly specialized nerve ends, which are called sense-organs, and stimuli are carried along the nerves to the brain. If the brain is conscious of the report, it makes some kind of a response; so the brain and the world act and react upon each other through the mediation of the sense organs. Were it not for the senses, the brain and the world would have no way of influencing each other. There are five such senses through which the external stimuli act—sight, hearing, touch, smell and taste—and the order in which they are named somewhat suggests the order of their educational importance. Sight, hearing and some uses of touch are highly educative, and furnish the material out of which grow the images necessary to intellectual life. Other uses of touch, taste and smell minister primarily to the body, seizing upon or warding off those things useful or harmful to physical life. However, there is no sharp line of difference between their intellectual usefulness, and the more that are used upon a given object, the more information concerning it the mind obtains.

2. Relation of the Senses and Knowledge. A baby seizing upon a new and interesting object subjects it to all of the tests of his senses. He grasps it in his hands, feels of it, gazes at it, pounds with it, puts it into his mouth. The knowledge he gains thereby is a vital, personal and somewhat definite thing to the child, with which the mere verbal description given him by an older person would in no way compare. To attempt a comparison of the child's knowledge of a doll as gained by his own investigations, using his senses,

and as gained by hearing an older person's verbal description of it, shows the unlikeness of the two experiences. His observation of the doll is necessary to put content into, or give meaning to, the verbal description.

The mind of the child at six years of age is not so different from the baby's mind that the school is warranted in completely changing the method of learning from observation through the use of the senses to learning about things through words of books or teachers. The child and the adult learn in the same way. There are discoverable principles of mental action common to both, and this readiness to seize upon the environment by means of the senses is one such principle, only that to the child the sense element plays a greater part. All recognize that even adults, somewhat habituated to dealing in abstractions, comprehend a new object more readily if they use their senses upon it. For this reason the stereopticon lecture appeals to the public more readily than the unillustrated lecture. Shopkeepers cannot prevent waste due to the tendency of the public to touch and handle objects. Even in art galleries, where the appeal of the objects is wholly to the eye, signs are posted forbidding the touching of pictures and statuary. These and many other illustrations which you will readily recall prove the general activity of the senses through life.

3. Necessity for Use of the Senses. Finding that the senses offer a tangible, concrete means of investigating things, we may safely assert that the child's senses are a factor to be utilized in the educative process. The statements of many people are unreliable because their observations have been made so carelessly that they are not able to give exact information. The special senses should be used as tools for investigating objects of interest to the child, and the teacher should make such requirements and arouse such inquiries that the child will use his senses carefully and definitely.

4. Defective Sense-Organs. It is the teacher's first duty to ascertain whether or not each pupil's organs of sense are in a healthy, normal condition. Investigations of school

children indicate that about twenty per cent are defective in hearing in one or both ears. A large proportion of the children considered peculiar, dull or inattentive are found to be defective in hearing. It is obvious that grave injustice is done these children if such defects are not discovered and corrected as far as possible. It is also futile to present lessons with a view to the child's getting sense-impressions if the outer organs are so defective that they cannot respond properly to stimuli. At free moments the teacher should make a series of tests, in order to determine for herself the condition of the eyes and ears of her pupils.

(a) TESTING THE EAR. A test of hearing may be made by means of a watch. A person of good hearing will ordinarily hear the ticking of a watch when it is five feet away, but since the ticking of watches differs in loudness, the teacher would best ascertain how far her watch can be heard by the average listener. To find how far from the ear of the pupil to be tested the ticking can be heard, lay a tape line from the child to the opposite side of the room. Place sanitary cotton in one of the child's ears and have him close his eyes; then approach gradually, noting the distance at which the child can hear the watch tick. Make a separate test for each ear. He may indicate by movements of the finger the rate of the ticking. The test should be made several times to insure the correctness of the report. If his hearing is found to be defective, his parents should be notified and advised to consult a physician, who may find that adenoid growths are the cause, in which case their removal will probably put the child into normal condition and permit him to take up his school work with new zeal. It may be but a temporary impairment, due to recent illness, such as measles or scarlet fever. He should be given a front seat on that side of the room which allows him most use of his better ear, for the two ears are seldom equally defective. The teacher's knowledge of the child's defect will incline her to a tactful consideration of him, and to an added effort to speak clearly and distinctly, for his sake; and she will not be likely to

condemn him for dullness or inattention. See *Care of the Ear*, page 198.

(b) TESTING THE EYE. Each pupil's sight should be tested at least once a year. The per cent of children with defective sight is greater than the cases of defective hearing. Test types employed by oculists, together with directions for their use, are now accessible. These cards can be obtained of The Eaton Co., Toronto, or of any oculist. They cost but a few cents, and should form a part of the teacher's outfit unless she is in a system of schools where the superintendent or principal is provided with appliances for testing the eyes of children. To test a child for defective vision, place the card in a good light and seat the child in front of it, twenty feet distant. Place a card over one of the pupil's eyes, but tell him to keep both eyes open, and name the letters, beginning with the largest and passing successively to the smaller sizes of type as long as he can distinguish them. If he cannot read without hesitation letters which the normal child should see easily at a distance of twenty feet, take the next largest type that he can read; notice the distance at which it should be read by the normal eye. Repeat the experiment with the other eye. The child's parents should then be informed of the result of your test. This will usually lead to his receiving the needed attention. These tests should be made when no other children are present, and should be so conducted as to relieve the child of all embarrassment. Headaches and nervousness are frequently the result of eye strain.

(c) RIGHT CONDITIONS. When the eyes are found to be in normal condition, provision should be made to keep them so. The schoolroom should be adequately lighted, the main light entering preferably from the left of the children. The books should be printed in clear, large type. In the primary grades the non-loop letters should be at least two millimeters in height, with a space between lines of four millimeters. Blackboard writing of the teacher and the children should be large and distinct, the non-loop letters being about two inches in height. Copy-books are a strain upon the eyes, and are

pedagogically poor for other reasons; but if they must be used, the periods for such work should be very brief. Only jet black ink should be used. If needlework is taught, all the materials should be so coarse that fine stitches are impossible. The making of large bags of art burlap and work of similar nature is far better than fine sewing for little children, because there is no strain upon the eyes, nor upon the small muscles of hands and arms. See *Care of the Eye*, page 194; *Seats*, page 287; *Lighting*, page 291; *Blackboards*, page 293.

5. Facts Concerning the Senses. When the primary teacher is satisfied that each child is equipped with normal sense organs, and that the conditions of the schoolroom are adjusted to preserve these organs, she should so plan her work that every lesson demands some activity of the senses. In order that this work may be done successfully, she needs to understand the following facts concerning them:

(a) **DEVELOPMENT OF THE SENSE-ORGANS.** At the age at which the child enters school his senses are keen, but the organs of special sense are not fully developed; therefore, the pupils of primary grades should not be given exercises requiring too fine distinctions in color, form or measurement. At first, simple objects should be used, and observation of the most prominent features only should be required. However, the teacher must never forget that the child's interest in an object gives him a motive for the observation, and she should always select objects of interest, even though they are occasionally more complex than she would wish. Such objects she will find in connection with all the primary school studies; they should always be used in connection with the studies and as a means of approach to them—not, for their own sake, separate and apart from others things.

(b) **THE FUNCTIONS OF EACH SENSE.** Each set of sense-organs conveys to the mind ideas peculiar to itself, and which primarily cannot be conveyed through any other channels. A person born blind never has an idea of color, and one born deaf never has an idea of sound. Some blind people form apparent exceptions to this, but in every instance these people

became blind after birth, relying, after their misfortune, upon their past experiences.

(c) **ALL THE SENSES MUST BE USED.** To appeal to some senses and neglect others is to give the child a one-sided mental development, because each sense contributes something to his store of knowledge which none of the others can supply. The sense of sight is more easily appealed to than any other, and teachers are prone to arouse images gained through sight, to the neglect of hearing, touch, taste and smell. Primary knowledge obtained through the eye alone is incomplete.

(d) **PROPER PHYSICAL CONDITIONS.** The senses are keenest when the body is in an unwearied condition. This keenness is dulled by general fatigue or a prolonged use of the special organ. An odor which at first is disagreeable is soon tolerated, and a little later is scarcely noticed. Water which feels hot when the hand is first plunged into it seems to cool quickly, because the sense of touch has become accustomed to the temperature. Nervous diseases often irritate the organs of special sense and lead to abnormal activity. Sometimes, in children of nervous temperament, some of these organs are abnormally sensitive; a slight sound causes the child to jump, and a touch to which others would give little heed, produces pain. Such children should be watched very carefully to see that their senses are not unduly excited by any school exercise.

6. The Sense Factor in All Lessons. By presenting subjects so that the senses may lay hold upon them, the apparently dull child in the room may be aroused physically and mentally. There is no better way to get a child into an active condition of mind and body than by making his work so tangible and concrete that his eyes and ears and fingers and muscles are called into play and given work to do which reacts upon his ideas, making them more vivid. By no other means can the motor-minded, "thing-thinking" children be brought into participation in school work. The senses cannot be trained apart from facts to be learned. They cannot be

exercised apart from the acquiring of information about things. This indirect sense-training results naturally and inevitably from interest in and observation of things in the immediate environment. The motive behind the use of the senses gives meaning to the child's observations.

(a) **READING.** The primary teacher who realizes the value of sense-training will plan her first reading lessons upon objects present to the children's senses, as indicated in Lesson Two. She will find many things which may be brought into the schoolroom to serve as subjects for these first blackboard reading lessons. It may be Mary's doll or Alice's kitten, or George's wagon or a bunch of dandelions or pussywillows, or a crawling caterpillar or a toad; but whatever it may be, the actual thing should be there in the room for the children to handle and look at. The words then will be the children's words, representing their ideas gained through their experience with these things. The first grade children in a city school were given a reading lesson upon milkweeds. There were no milkweeds within many miles of the schoolhouse. The children read of the "milkweed balloons which floated up into the air." Later they were asked to draw pictures of things in the reading lesson, and, using colored crayons, they drew red and blue and yellow disks representing the gas balloons, with strings attached which they had seen vended upon the city streets. Their notion of milkweeds was wrong because they had never had the experience of touching and seeing milkweeds. Children should never be allowed to use symbols for ideas and things which are unknown to them. It is allowing wordiness or a pretense of knowledge to pass for genuine knowledge. Too often reading is only word-naming, and does not reach back to this necessary sense experience with things.

(b) **WRITING.** Likewise the child's first writing and composition lessons should be based upon direct acquaintance with things. There is more chance that his writing will be genuine and interesting to him if it grows out of his experience. In the first grade he may write only short sentences,

but these should relate to actual experiences. See *Spelling and Penmanship*, pages 154-183. The first grade child should do nearly all of his writing with chalk upon the blackboard, and but little at his desk, and he should be taught to write very short, simple sentences expressing ideas of some interest to him. The teacher should first write the short sentence, the children watching her movement and the resulting form. She then should erase her writing so that the children must depend upon their complete picture or image of her writing, and not mechanically copy it, line for line. The children, being desirous of writing, will observe the teacher carefully. They will use the muscular sense, touch and sight as means of accomplishing the thing of interest to them. Again we see that the activity of the senses is never to be sought as an isolated thing, nor an end in itself, but as a means of accomplishing something. Second grade children may write at their desks, if given sufficiently large materials to prevent the fine writing that produces tension of nerves and uses too small muscles of hand and arm. Marking crayons, or pencils with very large, soft and blunt lead, and rough, unruled paper the size of desk tops, or longer, will require the large, free movement of arm and hand and make no strain upon the eyes. Third grade children may use ink, if the pen point is coarse and the paper ruled into spaces twice the width of those on ordinary foolscap.

(c) NUMBER. Let us apply the same principle to the teaching of primary arithmetic. A generation ago children were taught to "cipher" or to "figure." The number facts learned by little children were given as sums of figures, and the children learned to perform certain operations upon them and get correct answers. Teachers should bring every number fact to the children through their own activities in handling objects. All the simple number facts may be met in the making of cardboard boxes, raffia picture frames, reed baskets and other articles. (See *Construction Work*, page 58, Sections 35-37.) The playing of games involves score keeping. For instance, a board with several five-inch or six-inch holes

cut in it may be used as a target, and bean bags may be thrown through the holes, each bag thrown through counting three or four points. Or, small hoops made of rope may be thrown over an upright stake, each hoop thrown over counting a stated amount. These games furnish exercise for the muscular sense. (See *Games*, Volume One, page 198.) The teacher should have boxes of various objects, such as sticks, toothpicks, marbles, etc., which she may use to present number facts when her ingenuity in providing games and handwork fails her. While we know that those things which have motive and purpose to the child are the best means of involving him in number activity, practically we find it difficult always to provide such games and handwork as will present the number combinations which are necessary. At such times the purely "objective" method may be resorted to. While it ignores the child's interest in purposeful acts, it does appeal to his interest in manual activity. The sticks or marbles should be distributed among the children, and in combining and separating these they discover number relations through their own senses. Number, then, is felt to bear relation to things, and to be vital to life. When children meet their number problems first through handwork or games, the number facts are associated with their first-hand experience with things, and have a reality that such tests lack when taught abstractly.

(d) GEOGRAPHY. Geography, which is introduced as such into third or fourth grade, utilizes the child's sense-perception as a tool by which his mind may grapple with geographical facts. Let the land and water features close about the school and the neighborhood industries be the child's first teachers of geography, because these things he investigates by direct sense-perception. The surroundings of the schoolhouse will very likely offer examples of hills, valleys and plains, and after a heavy rain, rivers, streams, islands, peninsulas, capes, bays, etc., and the changing of land forms through the action of water in cutting away and depositing soil. Even though these are found in miniature, the child's discovery of them,

hearing the name for each form in connection with the thing seen, will give them a reality to his mind which the book description alone would not equal. When the child returns to the schoolroom, let his senses be enlisted once more for the clinching of his newly acquired knowledge. Give him a large, shallow sand-pan, and let him illustrate with it the various forms of land and water action. Then have him lay a large piece of paper upon the floor and draw upon it those features in the environment which he has been observing, including features other than land and water forms, as houses, clumps of trees, etc. Let him keep the right direction always on his paper, keeping the north of his diagram always to the actual north. This will tend to give a sensuous reality to all maps, and it also tends to do away with calling the north on a wall map "up." It frequently represents low land, and is "down," not "up." Such mistakes result from using maps without thinking of the relation they bear to the things they represent; and giving the child sense experiences and then having him chart these experiences for himself will do much to put reality into other maps.

Take the children to see the industries of the neighborhood in operation. The three principal activities that men have always engaged in are connected with the getting of food, clothing and shelter. Find examples of these activities in the neighborhood of the school, and take the children to see these things. If the school is in the country, take the children first to a farm and investigate the production of food-stuffs; then, if possible, take them to market where they are distributed. At the grocery store they will see these farm products in form for the consumer. They will see in the grocery other things than those produced on the farm, and the steps in the manufacture of these things, something of the countries and the people from which they come, will assist the children to feel the reality of other places and peoples. If the school is in a town, the teacher would better take the children to the grocery store first, since it is nearest at hand, and then trace its stock back to the farm and other places, as suggested above.

Next, the study of clothing may be taken up. The garments which the children are wearing will include linen, cotton, woolen, silk, leather, fur and rubber. These should be examined and differences of many kinds found. The different senses may be used to advantage in this work. The children should handle samples of these materials until they can discriminate between them by feeling. Bits should be burned, and the children should get the characteristic odors of each—the oily smell of woolen, the hairy smell of silk and fur, the smudge of cotton and linen, and the stench of rubber and leather. A study of the growth and manufacture of these materials will offer as wide a field as time will permit the teacher to cover.

Lastly, for a study of shelter visit some house in process of construction and then study the sources of materials there used. Three books which may be used to amplify the experiences gained through the senses are *How We Are Fed*, *How We Are Clothed* and *How We Are Sheltered*, by Chamberlain, and published by the Macmillan Company.

Out of sense experience of geographical facts the child acquires definite ideas which will assist him to understand those things of which he will read later in his geography, and which it will be impossible to take him to see. Because so much of his later study must be based upon earlier and simpler sense experiences, it is important that these sense experiences of the primary grades should be as clear, definite, accurate and frequent as possible.

(e) HISTORY. Through geography the children have become interested in present day activities in obtaining food, clothing and shelter, and will then be interested in finding out how men used to obtain these necessities. This will lead to a study of primitive life. If accessible, a museum should be visited, where specimens of these things may be seen. Then the children should draw and construct, with whatever materials are available, the moccasins, body-coverings, head-coverings, weapons, traps, tents and caves which they have discovered were used by primitive men for food,

clothing and shelter. Some excellent books which may be used to amplify the sense experiences are *The Tree Dwellers*, *The Early Cave Men*, *The Later Cave Men* and *The Tent Dwellers*, by Dopp, published by Rand, McNally & Co.

Another phase of history—local history—may also be approached through sense experiences. Old settlers may be interviewed, old land-marks visited, and, if possible, a museum visited where relics may be on exhibition. Such things will vivify the book material and give reality to incidents therein related.

A third phase of history, proper, for late third grade or fourth grade, is local government. This should be approached through experience rather than through a book. The children should be taken to the city hall, where, if possible, they should talk with the mayor as to his duties as executive of the town; they should attend a council meeting, or, if that is impossible, talk with a councilman concerning his duties, and examine the records of council meetings and visit the council chamber; and, thirdly, they should talk with the city marshal or policeman, those who are directly active in enforcing the laws. Such experiences lay the foundation for understanding provincial and national governments.

(f) DRAWING. In drawing, the pupil is given an object to handle, look at, and draw as it appears to him. The teacher points out mistakes by helping him to a more careful observation of the object, noting points wherein the drawing does not accord with the observable facts. Drawing demands definite and exact observation, and the result is proof of the accuracy or inaccuracy of the observation. The senses of sight and touch must both be used in observing the object and in recording the impressions so gained by the child. If the child has drawn an apple and failed to record the depressions in its rotundity where stem and blossom grow, the teacher will not tell the child to draw it so but she will ask him to feel of it again and when he finds the depressions (and the teacher may have to call his attention to them by some adroit questions), she will then ask him if his drawing tells

about them; if it does not, he must change it so that it will tell the facts about the apple. Occasionally the teacher will ask the children to draw some object from memory. After attempting it and finding their limitations in clearness of mental pictures, they should be given an opportunity for observation again; this time they will see much more definitely and accurately, and their next drawing will be much truer to the facts of the object.

(g) **NATURE STUDY.** The first requirement for nature study is contact with nature through sense-perception. The teacher's effort should be turned to arousing curiosity and inquiry in her pupils' minds, and then leading them to satisfy the inquiry by first-hand investigation of nature, which leads to a wider and more intelligent research.

7. Importance of Indirect Sense-Training. The mind's desire to know about a given set of facts quickens observation in that field. A store of ideas and questions concerning these facts accumulates, and this wealth of mental content makes the mind ready to investigate the subject further, using sense-perception as one means of the investigation. It is the mental content or knowledge that makes one observant in a given direction, not a keenness of sense perception in itself. A naturalist whose mind is already filled with ideas about nature notices a wealth of inconspicuous details when he goes into the woods for a ramble. These inconspicuous things are significant to him; they have meaning, because they fit into his previous experience. The ordinary observer accompanying him might say that his sense-perception is very keen. But upon examination it would be discovered that he was quite likely to be unobservant of people's clothes, of changes in the hanging of the pictures in his home, of slight differences in flavor of foods. These are not along his lines of interest. His mind is not curious in these directions. His senses give no evidence of keenness in themselves when used upon *any* set of facts, but only when used upon those things which his mind, by previous knowledge, is fitted to attend to.

The difference between the naturalist and the untrained

observer is not due to the action of the sense organs, but to their previous experiences, which either interpret or fail to interpret the report of the senses. There is no independent power of sense-perception keen in itself for seizing upon any kind of facts. Rather, there is keen sense-perception along lines in which one is interested and has some knowledge. Interest furnishes a motive for perception. The content of the mind, its "apperceptive mass," determines when and how thoroughly the senses will be employed. The tea taster's experience in testing different grades of teas gives him such definite knowledge of teas that he can make fine discriminations between various qualities, not because he exercised his sense of taste in every way, but in this particular way until he acquired a store of ideas concerning teas. It is the content of the mind which makes it capable.

Therefore, the efficient primary teacher directs her children's interests in things about them, and provides that they shall come into direct sense contact with these things, seeing that ears and eyes and fingers are used as tools for intimate discovery. She knows that the more ways of testing that the child uses the fuller and more definite will be his comprehension.

8. Books for Teachers.

Child and Curriculum. Dewey. University of Chicago Press.

Fundamentals of Child Study. Kirkpatrick. Macmillan Company.

School Hygiene. Shaw. Macmillan Company.

Study of Children. Warner. Macmillan Company.

Elements of Psychology. Thorndike. A. G. Seiler, New York.

Education of the Central Nervous System. Reuben Post Halleck. Macmillan Company.

Apperception, or, A Pot of Green Feathers. Rooper. C. W. Bardeen, Syracuse, N. Y.

Apperception, translated by De Garmo. Lange. D. C. Heath & Co.

TEST QUESTIONS

1. What defects arise from training the sense of sight to the neglect of the other senses? Give one or more illustrations from your own observation.

2. By what mental process are you able to recognize a person by his voice, a bell by its sound, or the quality of a fabric by its effect on the sense of touch? Give one illustration.

3. What is your plan for detecting defective hearing? For detecting defective sight?

4. Show why the senses are best developed through the regular school exercises.

5. Show how keen observation assists one in reasoning.

6. What school exercises do you consider best for training the powers of observation? Give reasons for your answer.

7. In what way do games aid in training the senses? Give a specific illustration.

8. What is the relative value of the sense of touch, compared with the sense of hearing? Compared with the sense of sight?

9. Why does fatigue affect the activity of the senses? Of what value is a knowledge of this fact to the teacher?

10. Which do you think the more advantageous for developing the powers of observation, the city or the country? Give reasons for your answer.

CHAPTER EIGHT

MORAL TRAINING

INTRODUCTION

Let reverence for law be taught in schools and colleges; be written in spelling books and primers; be published from pulpits and proclaimed in legislative houses, and enforced in courts of justice. In short, let it become the political religion of the nation.

Abraham Lincoln.

1. Necessity for Moral Training. The subject of moral training in public schools has received attention ever since schools were established and in all systems of education moral training has occupied a prominent place. It was formerly the custom in some schools to give set lessons on morals, which had for their purpose the teaching of the underlying principles and rules of moral action; much of this teaching was formal and consequently ineffective.

Failure to secure good results by the old method, combined with the belief, generally prevalent in many localities, that moral training cannot be separated from religious training, are doubtless the most potent reasons for the status of moral training in the public schools of many countries at the present time. With scarcely an exception, all moral instruction in our public schools is indirect and incidental. While educators agree that indirect and incidental teaching is of the greatest value, they also agree that unless such teaching has back of it a well defined purpose, it is liable to be disconnected and well nigh worthless.

That moral training should receive more attention than is given it in most schools is evident from the following reasons:

(a) **DISREGARD FOR LAW.** It is not to our credit that we are foremost among the great nations of the world in our disregard for the laws upon our statute books, provincial and national. Very many of our citizens look upon the observ-

ance of certain laws as a matter of convenience, of commercial advantage or of public sentiment. This is particularly true of those laws having for their purpose the preservation of public health and the prevention of contagious diseases. Laws restricting commercial privileges and imposing license fees and other taxes are also frequently evaded. Many other illustrations of this increasing tendency might be given.

Evasion of law leads to disregard for law; therefore, the schools should impress upon the pupils the sacredness of law and the obligation of all citizens to obey the laws under which they live—those of the nation, province and city.

(b) LACK OF HOME TRAINING. Home conditions are far different from what they were in the days of our forefathers. Then the home was the center of all industry and influence; now, especially in cities, it is too often only the place where the members of the family sleep and take some of their meals. In many such homes the younger children seldom see their father except on Sundays and holidays. The street is often the only playground, and the children's associates are those who come from homes similar to their own. Under such conditions home influences are less strong than formerly, and it is the duty of the school to supply, as far as possible, this lack of home training.

(c) LACK OF KNOWLEDGE OF RIGHT AND WRONG. In the main, children desire to do right, but they frequently err because they do not know what is right. In some homes they are taught to know the right; in others, they receive little or no instruction along this line. The instructor has excellent opportunity to teach her pupils to know and to do what is right.

Teachers must not conclude that it is sufficient to teach the pupils the difference between right and wrong. Knowledge alone cannot transform character. Character depends on what is wrought out by each individual under the direction of his own will. The child is happy when guided by the teacher or by his parents unless the guidance is based on authority alone, and thus becomes tyranny. It is higher

moral training to make a boy a constructively transforming agent than to teach him all the moral precepts and gems of wisdom that have ever been written. At first all children are usually destructive, but the very same character elements that make them destructive will, under proper guidance and by appropriate conditions, make them constructive.

2. Factors in the Problem. In her work in moral training the teacher has certain factors with which she must deal. While these may vary in proportion in different schools, they are all present and must be considered. They may be roughly classified as internal agencies, external agencies, and method. Each group is worthy of careful consideration.

INTERNAL AGENCIES

3. Nature of a Moral Act. A complete moral act includes the mental activities of knowing, feeling and willing. In order that the child may perform a moral act, he must know that it is right. He must have a desire to perform the act, and must make the desire effective by carrying it into execution. The internal agencies, then, which constitute an important factor in moral training are those forces within the child by which, in a large measure, his activities are determined.

4. Heredity. Every child is born with certain mental tendencies which become evident early in life. One child is quiet, possibly somewhat morose, and likes to think things out for himself; he may be slow in reaching results, but he is usually right. Another is fond of play and full of fun and laughter; he prefers to be carried on his way by his associates and spends very little time in earnest thought. A third is easily grieved, and so on. As the teacher becomes acquainted with her pupils, she discovers these individual differences to which she must adjust herself.

The power of heredity is much stronger in some children than in others, but in nearly all hereditary tendencies can be modified by environment and training. These tendencies are the first to develop, and when the child enters school

they usually form his leading traits of character. If good, they are to be fostered; if evil, they should, as far as possible, be suppressed. These tendencies affect the child's temperament, mentality and will, and they may affect his physical condition; this, in its turn, if abnormal, tends to aggravate and strengthen any peculiarity which the child possesses. How to deal with children possessing strong inherited tendencies is often a perplexing problem, and one which taxes the teacher's tact and ingenuity to the utmost.

5. Emotions. The emotions develop more rapidly than the reason and the will, and, consequently, the child is subject to their sway much more than the adult. The tendency to act in accordance with his feelings is so strong that he is impulsive rather than thoughtful; he laughs, cries, strikes, kicks and does numerous other acts simply in response to his feelings. When actuated by anger, jealousy, desire for revenge and other malevolent feelings, he thoughtlessly does what he may become sorry for when he takes time to reflect. The teacher who understands this condition endeavors so to manage her school as to keep the pupils in a pleasant frame of mind, and to prevent ill feelings of any description. In the right school atmosphere the desirable emotions are strengthened by constant activity, and the undesirable are weakened by lack of opportunity for activity.

6. The Will. Moral training is synonymous with will training. Since the will is the most prominent factor in moral action, it must be given due consideration in any plan for moral training that the teacher may adopt. The will develops slowly, and previous to the fifteenth year it is weaker than the emotions. During this formative period the will should be strengthened by constant exercise in making right choices. As far as possible, occasions for lapsing from these choices should be avoided, for such lapses weaken the child's power of decision. The will should also be strengthened in its power of inhibition by encouraging children to resist their desire to do those things which are injurious to themselves or to others, and by assisting them to render

prompt and cheerful obedience to teacher and parents. The child's will needs guiding, not breaking.

7. Experiences. Every experience leaves its impression upon the mind, and by the time the child arrives at school age he has accumulated a stock of impressions which have given him a certain view of life. This view includes his ideas of right and wrong, and determines very largely his attitude towards his schoolmates and the teacher. A child coming from a home pervaded by an atmosphere of kindness and gentility will usually have a kindly feeling for his associates and the teacher; moreover, he will be kind and gentle, and will refrain from doing what he thinks will injure others. On the other hand, a child whose home life has been notably lacking in these qualities will usually be suspicious, careless of the rights of others, and will consider many things right which the teacher and most of the children consider radically wrong. Between these extremes are numerous grades or conditions, each of which makes an impression upon the life that it touches, and nearly all of these grades are found in every school.

8. Ideals. The child's ideals are determined very largely by his environment and experiences; his associates exert the strongest influence in their formation. These ideals enter very largely into his new life and in time influence his ambitions and actions. If right ideals are formed before the school period of life, the child's moral training has been well begun; but if he cherishes wrong ideals, the teacher has the difficult task of leading him to change them for those she desires him to have. The child's ideals and experiences help or hinder in the work of moral training.

EXTERNAL AGENCIES

9. Importance. In the preceding division we have discussed briefly those agencies which lie within the child; some are inherent, others are acquired. We now wish to call attention to the most important of those external agencies which influence the child in the formation of character.

When these agencies exert right influences their power for good is immeasurable. When their influence is wrong, they constitute an obstruction which it is almost impossible for the teacher to remove.

10. The Home. The home is the most important agency in the development of character. It is here that the child comes under the influence of his parents, receives his early moral training, and forms his first ideals. In the home he spends the greater portion of his life during the period of childhood and youth, and in the home his habits of life are largely formed and even his choice of life work is made.

The school has the child for an average of six hours a day from six to nine months in the year, while the home has him the remainder of the time. We can see at once that even the best schools cannot accomplish as much as the home in the development of character. Moreover, the school grew out of the home.

The child needed to be taught, and in the early settlement of this country, the whole time of the parents being taken up in providing the necessities of life, they hired a tutor. This tutor, or pedagog, went from house to house and taught, and finally his employers combined their interests and provided a place where all could be taught, each bearing his proportionate share of the expense. Naturally, those of the same attainments were taught together, and thus was developed the class; out of the class grew, in course of time, the grade; from the grade, the graded school; from the graded school, the graded-school system, by which more than fifteen million children of the United States are taught today. The school, then, in all its greatness, is the outgrowth of the home. It touches and is upheld and maintained by all the families of the United States. It is man's providence against ignorance and for wisdom in the child. It is the home's way of working out the best interests of the child. It is the creation and creature of the home, and not the home its creature.¹

We can readily understand that the school and the home should be in unison in the work of moral training. The teacher who possesses the tact and ability to maintain cordial relations with the various homes represented by her pupils

¹ Helen L. Grenfell. From an address before the National Educational Association, 1899.

seldom fails to secure satisfactory results in moral training. All teachers should study how to establish and maintain relations of this kind. In small towns and rural communities this is not difficult, but in the crowded districts in large cities it is often impossible for the teacher to visit the homes of her pupils. She can, however, invite the parents to the school and in this way become acquainted with some of them.

In many places parents' organizations are formed, and through them a close relation between the school and home is maintained. In general, these organizations should be managed and officered by the parents, while the teachers should cooperate with the management in planning the work and providing for the meetings.

11. Society. By society we mean the people outside the home with whom the child is brought in contact. The associations thus formed are more or less potent in the formation of the child's character. Taken as a whole, society stands for public opinion, and to this both old and young alike conform. If this opinion stands for high ideals and noble living, it wields a strong influence for right; but if public opinion sanctions those beliefs and practices which are injurious alike to the community and the individual, it must be radically changed before moral training in the schools can make much progress.

Within every community we find certain groups, some organized for definite purposes, others seemingly thrown together by chance, but each exerting its influence upon the child. Chief among these are the following:

(a) **THE STREET.** By the street is meant the association which the child forms in city or town in promiscuously mingling with people whom he meets. Many of his street acquaintances become his playmates, and in the congested districts of large cities the street is usually his only playground. The influence of such associations is usually productive of more evil than good. Many a child has entered upon a career of crime through the influence of associates whose acquaintance was formed in this way, and much of

the insubordination in the home and the school can be traced to a like cause. The child's associations should be known and controlled by his parents.

(b) **THE GANG.** The gang is formed in response to the child's craving for companionship, and his wish to coöperate with others. The gang consists of members of nearly the same age who band together for specific purposes. It is more frequently found among boys than among girls. The leading idea in these organizations is loyalty—loyalty to the organization and to the leader. So far as this goes it is good, but altogether too often the purposes of the gang are evil, and the influence of the members upon each other becomes anything but desirable. The gang spirit flourishes between ten and fifteen years of age, after which it begins to decline. If the influence of the gang is favorable to the teacher and the school, the organization may be used for accomplishing much good. There is nothing wrong in the gang idea itself; it is the outgrowth of a natural desire on the part of those forming the organization. Both teachers and parents should recognize this, and by sympathy and tact gain control of these organizations, not in an official sense, but in an advisory manner. By so doing they can lead the members and the organization as a whole along right lines and make the gang a strong force in moral training. Especially during the adolescent period is this necessary, because imagination and desire are particularly active, and the will, judgment and reason have not assumed their full sway.

(c) **OTHER ORGANIZATIONS.** Social organizations for children and young people more or less under the control of adults are found in almost every community. Some are church organizations; others are branches of large societies distributed over the country, such as the Audubon Society and the Agassiz Society, and there are still others that are purely local. When rightly managed, these organizations are very helpful in developing among their members the spirit of loyalty and in impressing those virtues of society which are so essential to a successful life, namely, courtesy

and thoughtfulness for others. They are also beneficial in giving a training in coöperation, which is essential in the accomplishment of any great result.

12. Schoolhouse and Grounds. While the home and society are factors with which the teacher must reckon, they are primarily without the sphere of her control. Her relation to them is only advisory, and her influence upon them such as she can secure through her personality, her tact and her success as a teacher. The school and all that pertains to it are, however, under her direct control, and here she should be able to make her influence strongly felt.

Order, neatness and beauty make a strong impression upon children and are highly appreciated by them. An important agency in moral training is found in the school premises as a whole. If everything about the grounds and building is kept in good repair, if the lawn has a rich carpet of green, with flowers and shrubs here and there, and if there is a space for a school garden where all can work, the influence of the school grounds will be most helpful.

The teacher cannot always secure these conditions, but where she is responsible for the care of the school premises she can do much toward establishing them. In graded schools the principal or superintendent, or both, are expected to look after these matters. For a more detailed discussion of what may be done, see pages 286-296, Sections 3-5.

13. The Schoolroom. The influence of the schoolroom is more far-reaching than many think. Its effect should be such as to give the boy an impulse to remove his hat when he crosses the threshold. Softly-tinted walls, a few choice pictures, perfect cleanliness, furniture and apparatus properly arranged and window shades so adjusted as to allow the proper amount of light to enter, will give the room an atmosphere which tends to produce this effect. So far as possible the teacher should see that her room is in perfect condition before the first day of school, then by constant vigilance maintain the high standard she has established.

Such a room brightens the lives and appeals to the highest sentiments of both teacher and pupils. If boards of education realized more fully the influence of the schoolhouse and schoolroom in the development of character, much greater attention would be given to the design and decoration of school buildings than they now receive in most localities. Wherever it is necessary, the teacher and the parents' organization should use their influence to secure neat and attractive buildings, with schoolrooms suitably lighted, furnished and decorated.

14. The School. The school itself touches the lives of the children even more closely than the schoolroom. It is possible to create such an atmosphere within a bare and poorly-equipped schoolroom that the moral nature of the children will grow under it as a seedling grows under the summer sun. The general agents of the schoolroom which contribute to moral training are discipline, the requirements of regularity in attendance, and promptness in obedience to regulations and in the preparation of the work assigned. Whatever his training at home, when the child enters school he comes in contact with new conditions and is brought under new influences.

The day that he first goes to school is the turning point in his life. It is the day that he takes his first great step, from a life in which his home is all in all, towards a larger life in which the complex of relations, which we call the State, will become real and significant for him. . . . It has not yet dawned upon him that the family, which is his world, is constituted and protected as a member in a larger society. The school, and particularly the kindergarten and primary school, is for him an intermediate stage by which he may be led gently and surely to a consciousness of his wider relationships.¹

This change requires a great deal of adjustment, and during the process the child learns many new lessons about his conduct towards others. One of the first and most important of these is that of prompt and cheerful obedience to the commands of the teacher and the rules and regulations

¹ Elmer Ellsworth Brown, Chancellor of New York University.

of the school. This lesson of obedience is one which the child has the right to be taught early in life. He next learns that he works with others, and that absence from his daily tasks affects their work as well as his own. He is therefore under obligation to be regular in attendance. He also learns that failure to prepare his lessons as required hinders the work of the teacher and the other pupils, and the obligation to be prompt is thus impressed upon him. These three virtues, obedience, regularity and promptness, if practiced through the school period of life, become habituated in the child and constitute strong elements in his character in after years.

Again, the school atmosphere makes for good or ill. If this contributes to the child's happiness and pleasure, it fosters the virtues of kindness, gentleness, respect and sympathy.

In most schools, therefore, the indirect moral training obtained through the general regime is much greater than many imagine. With more careful attention to the matters already mentioned, this training can be made still more effective.

15. Reverence for Law. The teachers who fail most certainly in securing moral development in their pupils are those who demand submission to themselves instead of obedience to law. Obedience should never become subordination to an individual. Children love law till some tyrant robs them of their priceless love. No boy ever disputes the law of his game. The book of rules is supreme to him. This natural love of law as a guiding principle should be developed into a reverence for the rules in school, and in a logical sequence into reverence for the laws of his city and of his country, and away beyond these laws to a reverence for the laws of his own life and for the laws of God. To reveal law as a guide and a friend should be the basic principle in moral training.

16. The Teacher. The old adage, "As is the teacher so is the school" will never lose its force. Without question, the teacher is the greatest moral force in the schoolroom, and with rare exceptions the pupils will strive to pattern their lives after her example. The heritage of a pure, forceful life

is the best legacy she can bequeath to them. "Moral personality is the most precious possession of any teacher. Let him share it with his pupils in whatever he finds best, so long as he offends none." Cheerfulness, faith in children, sympathy, justness in the administration of all the affairs of the school, will enable the teacher to lead her pupils to the formation of those habits and ideals which lie at the foundation of character. Let the branches taught be what they will; let the other work of the school follow such lines as conditions make advisable; the development of character in her pupils transcends in importance all else and is the work which should receive the teacher's most careful attention.

METHODS

17. Underlying Principles. While through the regular routine of the school, truthfulness, honesty, industry and other virtues are instilled into the minds of the pupils to a greater or less extent, the results are not wholly satisfactory, and every conscientious teacher is constantly striving to do more in assisting her pupils to build character. The problem confronting her does not consist so much in determining what to do as how to proceed. With a program already crowded with other lessons, how can she find time to give special lessons in moral training? Provided time can be found, can as much be accomplished through such lessons as through the discipline and regular work of the school? These and other questions are constantly confronting the teacher, and she realizes that her work must be carefully planned if she would secure the desired results.

First of all, the teacher must understand the principles upon which character is built. Not that she should dwell upon them in her teaching, but that they may serve as her guide. In general, the less said to children about these principles, the better. They need to learn by doing, but the teacher should have very clear ideas of what the children are to learn. Chief among the principles by which the teacher should be guided in this work are the following:

(1) Character is an inward growth. Moral action originates in instinct, but "the rise from blind instinct to moral insight is not made in a single bound."

(2) Character is developed slowly, and is the result of the child's acts. Patience, perseverance and forbearance are necessary in the work of character building. The teacher must take the child as she finds him, and lead him by easy steps to a higher moral plane.

(3) Knowledge, desire and will enter into every moral act. Says Hon. George H. Martin, Secretary of the Massachusetts Board of Education, "The elemental psychology of all character-making is summed up in four simple sentences: "I see, I like, I wish I were, I will become."

(4) Law is universal; nothing in the universe can escape the consequences of its violation. Consequently, every child reaps the reward of his own acts. Responsibility is one of the earliest lessons which the child learns. Long before he enters school he has learned the effects of violating certain physical laws, but it takes a long time for him to learn that the consequences of violating moral laws are just as inevitable. Indirectly the teacher must assist him in learning this lesson.

18. Make a Good Beginning. At the beginning of the school year the children take up their work full of enthusiasm and good impulses. The teacher should take advantage of these conditions and direct these impulses along right lines. By pleasing manners, gentle speech, attractive personal appearance and executive ability, which shows that you can plan and do successfully whatever is best for the school, win on the first day of the term the respect and confidence of your pupils. When these are secured, see that they are never forfeited. When you have won the hearts of the children, your influence over them is practically without limit, and within the capacity of their understanding you can lead them to reach any ideal you set before them.

19. The General School Regime. In Sections 13-16 we have spoken of the influence which the general conditions

and exercises of the school exert. But in order that the greatest good may be derived from these exercises, the teacher should always have in mind their influence upon the formation of character, and plan in her presentation of each lesson to make its moral phase prominent. However, this must be done indirectly. Exactness of statement in number and language, determination of the facts in nature study, the effect of good deeds as often illustrated in the reading and history lessons, and the uplifting influence of noble sentiments when once impressed upon the minds of the pupils as they naturally occur in the lessons, should be left to do their work. This indirect teaching is often the most influential that can be presented; it is a constant, though silent force, an unseen hand directing the pupils in the path of right.

20. Special Lessons. There are many things pertaining to conduct which children should be taught, and which cannot well be presented in connection with the ordinary lessons of the school. These should receive attention at other times. The morning exercises afford good opportunity for some of this work, and periods devoted to special programs afford opportunities for the discussion of those topics which need more time than can be given to the opening exercises of the morning. With young children, whatever topic is begun should be finished at the time, since they are unable to pick up the thread of discussion where it was dropped at a previous exercise. With older pupils the discussion may be continued through several periods, care being taken not to prolong the subject beyond the point where interest can be sustained.

Conditions will vary so widely in different schools that no set plan for these exercises is given. In each case the teacher must make a plan to fit the conditions. The important thing is that the lessons be given. Some of the subjects which should receive attention in the primary grades are politeness, kindness, reverence, the treatment of animals, the treatment of plants, promptness, obedience, helpfulness, cheerfulness, honesty, truthfulness, behavior in society,

on the street and in public assemblies. With older pupils these subjects should be expanded and additional topics, such as self-control, industry, public duty, love of country and charity, should be treated as fully as the age and understanding of the pupils will permit.

21. Politeness. When the child enters school his ideas concerning the treatment of others are those he has learned in his home. Some children have been properly taught, while others have received practically no training in regard to these matters.

(a) **AT SCHOOL.** The pupils should be taught to greet the teacher and each other with a pleasant "Good morning," and to give a parting "Good evening" or "Good night" as they leave the building at the close of the day. This may be done formally, as when the teacher says "Good morning" to all the pupils after they are seated, and the pupils respond with "Good morning, Miss ——"; or it may be given informally, as when the teacher greets each pupil as he enters the building. The latter plan requires a little more time and attention, but in our opinion it is of far greater value. It has in it the element of personality, which makes every child feel that he is the object of the teacher's special interest and care. Where this custom is followed, children will almost invariably enter the room and greet the teacher as soon as they reach the school.

The common courtesies of society should also be practiced in the schoolroom. Teach the pupils to say "Please" when asking a favor, and "Thank you" for any assistance rendered or favor granted. If the teacher invariably follows this custom, most of the children will imitate her example.

An occasional reference to these matters in the morning talks, with emphasis upon the value to one of always being a gentleman or a lady, will not only encourage the pupils in their practice but also help them to feel that they are becoming men and women. Again, there are numerous lessons of common courtesy that need to be taught on the playground. Impelled by their enthusiasm and energy, the older and

stronger children often unintentionally trespass upon the rights of the younger and weaker. This is particularly true of the boys when playing games that call for running, jumping and other physical feats. The boy who is allowed to be a bully on the playground is liable to become the political boss in after life. Here is the place where he should receive his first lessons in respecting the rights of others, and in feeling the limitations which society and public opinion set upon his acts.

Littering the school grounds with the waste paper, the remnants of a lunch and other rubbish is sometimes done by thoughtless pupils. They should be led to see that in so doing they are trespassing on the rights of their schoolmates by making the grounds less attractive and enjoyable. Each owes it to the others as well as to himself to keep the premises neat and pleasing in appearance.

The points to which we have called attention are suggestive of what should be done to train pupils in politeness in schools, but instruction is not necessarily limited to these matters. Whatever instruction and training the pupils need to make the school an ideal community should be given. The teacher should be alive to these needs and plan her work to meet them.

(b) *AT HOME.* Sometimes the teacher's influence over the child's conduct is greater than that of the parents. It is therefore well for the teacher to discuss with the pupils what constitutes politeness in the home. One of the points upon which emphasis should be placed is cheerfulness. For one to be surly or ill-tempered in the home destroys the pleasure of all other members of the household. Attention can be called to the importance of cheerfulness by such questions as, "How many like to help mother? How many retire cheerfully when bedtime comes? How many get up promptly when called in the morning, wash, dress and prepare for breakfast without help? How many try to do promptly and cheerfully whatever father or mother asks them to do? How do you feel when some one in your home is surly or

angry? Do you suppose they feel the same way when you are cross or angry?" These and similar questions call the children's attention to many little matters and tend to make them more careful to practice in the home the acts and virtues taught in school.

22. Kindness. Children should be taught to love and have sympathy with all living things which are not harmful to human life. When they enter school they possess the elements of sympathy, but the feeling needs to be developed by practice and also by knowledge of their relations to people or to animals and plants.

(a) **SCHOOLMATES AND FRIENDS.** Most children mean to be kind, but they are often intentionally unkind. They know that it is unkind to inflict personal injury and to cause physical pain, but they do not as readily realize that it is unkind to injure one's feelings by misrepresentation, by preventing one from obtaining his rights, and by forming little cliques from which the injured one is excluded. Impress upon your pupils the evils of gossip, by example, by precept, and by refusing to listen to it; more than all, by getting the children interested in subjects which will so occupy their thoughts that they will have neither time nor inclination for telling tales about each other.

The same spirit of kindness which the pupils manifest towards one another should be manifested towards their other friends in the family and neighborhood. Especially should they be taught to be kind to the weak, the unfortunate and to strangers. Ask the children questions like the following: "How would you like to be sent to a city or town where you did not know anyone? If you asked someone to show you the way to a house or some other place, how would you feel if the one of whom you inquired laughed at you? How would you feel if you went to a foreign city and the children on the streets made fun of your clothes? Well, this is what children in this country sometimes do to children who come here from foreign lands. I hope none of you will do it."

(b) **ANIMALS.** How many children in your room have pets? Learn what they are. Probably several will have canary birds; some will have dogs, others own cats, and some may have pet rabbits or squirrels. If you can have one or more of these pets in the schoolroom from time to time, its presence will make the lessons on kindness to animals more interesting and impressive.

Lead the children to become interested in each animal represented in the list of pets, then ask them to study its needs with you and see how these needs can best be supplied.

Suppose we begin with the canary. What kind of food does it like best? How often does it eat? What uses does it make of water? How often does it like to bathe? Where should its cage be hung? What is the canary afraid of? Through answers to these and other similar questions, the children learn how to care for a pet canary and also learn that kindness to the bird consists in its proper care.

Pursue similar studies with the cat, the dog and other pets. But in studying these animals you should call attention to numerous ways in which we are often thoughtlessly unkind to them. We are unkind to the dog if we deprive it of a chance to get water when it is thirsty; if we allow it to go hungry, or compel it to remain at night in cold, uncomfortable quarters. Teasing any animal is unkind and often cruel, as when one pulls the cat's whiskers; these hairs are so sensitive that pulling them causes the cat intense pain.

From the study of pets pass to the domestic animals, and lead the pupils to see how dependent we are upon them for food, clothing, shelter and transportation. Show that it is not only unkind but positively cruel and degrading to abuse these faithful servants. Tell the children about the American Humane Education Society and its work, and lead them to form a society for the prevention of cruelty to animals. This society should include pupils of all ages, and in graded schools should extend through all the grades. Read or tell stories of the faithfulness of animals, selecting those which also show their habits and manner of life. Demonstrate

the value of birds to the farmer and gardener, and create a sentiment against robbing or destroying birds' nests.

Most of this work should be done in connection with the nature study lessons, but an occasional general lesson on kindness to animals should supplement the work done in the nature study classes.

(c) PLANTS. Children love flowers, but they do not realize the beauty and benefit of plants as a whole. If the school has a garden, through the care of the plants for whose success they are responsible most of the lessons upon right treatment of plants can be learned. If you have no such agency, pursue a course in the study of a few plants similar to that followed with the animals. The only plants which should be wantonly destroyed are those which injure crops or are poisonous. All others should at least be allowed to grow, and those upon which we depend for food, clothing or pleasure should have our best care. To neglect to supply plants with water and proper soil and protection is wrong. But it is not so serious a matter as the neglect of animals, because the animal suffers pain, while the plant does not.

23. Reverence. Do your pupils understand what reverence means? Probably they do not. If you find this to be the case, explain the meaning of the word. Ask them how many have a grandfather and a grandmother. A number of them will probably have grandparents living. Ask them how they should treat their grandparents. Some will have right ideas of the treatment of these elderly people, because they have been taught at home; others will need considerable instruction. "Would any members of the class like to have their grandparents treated rudely?" The answers to this question will commit the children to the attitude they should have towards all elderly people. With this as a foundation, give an occasional lesson on the courtesy and deference due old people, and commend as you have opportunity any acts of kindness or special politeness which any pupil has shown to an old person. The lack of consideration which children frequently show for the aged is very much to our discredit as a

nation, and the public schools should do all in their power to correct this evil.

But reverence extends beyond proper treatment of the aged. Children should learn and be led to feel a reverence for all created things, the laws and forces of nature, and, above all, for the Creator himself. The lessons in nature study and literature fail to reach their highest purpose unless they instill this spirit of reverence into the pupils.

The personality and attitude of the teacher are perhaps the most potent factors in securing this result. If she looks upon all life as the handiwork of God; if she is naturally kind to every living thing; if she sees and can lead the children to see in every creature its perfect adaptation to the life it is to live, she awakens in them that wonder for the Creator's works which leads to reverence for Him as the author and giver of all good.

24. Promptness. Children are expected to be at school on time, though occasionally there is a reasonable excuse for tardiness. Promptness, however, has a wider application than this; it means being on time with whatever one has to do. It relates not only to all of the exercises of the school, but to the duties of the home, as well. Children are proverbially slow, and unless those having them in charge take special pains to have them on time, they will frequently be late in the discharge of their duties. If allowed to form this habit in early years, it is liable to cling to them through life and constitute a great obstacle to their success.

What can the teacher do to secure promptness in all school work? First, make the school attractive. Let the opening exercises be of such nature that the children will feel that something of value will be missed if they are not present. This will serve as an incentive to promptness in attendance. Again, lead each pupil to feel that it is his duty to be prompt as much as it is the teacher's, and that whatever he does helps or hinders the work of all. If he is late, others have to wait for him, and the work of the day is not completed. But little of this can be done in the first and second grades;

still, a beginning can be made which in the following grades will develop into a strong influence in the school.

See that pupils have sufficient time to prepare the work assigned. The assignment of too long lessons is in some schools a fruitful source of dilatoriness. When the time arrives for the study of a lesson as arranged on the program, see that the pupils study that lesson; and when the time for a change of work arrives, see that the change is made, whether the work assigned is completed or not. A little experience will enable you to adjust the work and program so that the lessons assigned can be prepared within the time allotted for study.

Be prompt in calling and dismissing classes. If the recitation period is ten minutes, stop when the ten minutes are up. If the teacher is a laggard, she may be sure that the pupils will follow her example. A program is of no value unless it is followed. Every teacher should be sure that no cause for dilatoriness lies within herself.

Pupils in the third grade and above can be impressed with the value of time, and they should be led to see that time once lost can never be regained. Furthermore, they should be impressed with the importance of keeping engagements. If we admit that one may do as he pleases with one's own time, one certainly has no right to waste the time of another. When we fail to keep an appointment, and keep others waiting for us, we waste their time. When one pupil fails to prepare his lessons he wastes the time of the entire class. Only those who are on time succeed in business. By incident, illustration and maxim impress these truths upon the minds of the pupils. As a result, during their school career they will form the habit of being prompt in doing whatever they attempt.

25. Obedience. By obedience is meant prompt and cheerful compliance with the regulations of the school and the requests and directions of the teacher. We have already called attention to the fact that when children enter school they have a knowledge of some physical laws, and have experienced the consequences of the violation of these laws.

One of the great lessons which they are to learn during the school period of life is the universality of law. Everything that exists is under law; there are laws which govern the physical universe, and laws which govern the world of spirit; it is only as we obey these laws that we are prosperous and happy. The Bible tells us that "Love is the fulfilling of the law." Laws are necessary that we may act in harmony. Because of this necessity we have rules that we agree to abide by in the school. Without these rules none of us would know what to do or when to do it. The teacher must obey the rules as well as the pupils, otherwise they could not work together.

Third grade pupils can understand something of these principles, and the necessity for certain regulations. It is a good plan to have the pupils adopt by vote such regulations as the teacher sees are necessary for the government of the school. They then feel that the rules are of their own making, and, with an occasional exception, readily conform to them.

Besides the rules of the school, there are those of the playground which they are also expected to obey. From the school and playground it is an easy step to the discussion of obedience in the home, and the influence of a strong, sweet-spirited teacher is often of great assistance in the home, though acting as an unseen force.

The obedience which the teacher should strive for is not a slavish observance of rules, in which there may be conformity merely to the letter of the law, but that cheerful compliance with the requirements of the school within the limitations of which each pupil finds perfect freedom. This is obedience in spirit, though occasionally the letter of the law may be violated. In training pupils in obedience, remember that "the letter killeth, but the spirit maketh alive."

26. Responsibility. We have seen that all life is under law and that these laws cannot be violated without penalty. One of the laws which children must learn by precept and experience is the law of responsibility. As early in life as possible the child should learn that the consequences of his

acts are visited upon himself. He already knows that if he puts his hand upon a hot stove he, and not another, is burned; that if he stumbles, he falls. But he does not yet realize that action and reaction are just as certain in the realm of his mental and spiritual life. This truth the school must teach.

The child's desire for expression can be used to great advantage in impressing upon him the sense of responsibility. If he is faithful to the instruction of his teacher, he learns to read and gains a mode of expression which he otherwise would not have. John learns to write and Henry does not; John can express himself in writing, while Henry is deprived of this privilege as the consequence of his failure to apply himself when he had the opportunity. Lead the pupils to feel through the daily exercises of the school that they are individually responsible for the preparation of their lessons, and that they and they alone suffer if their work is not done.

From the daily lessons extend the teaching to all acts of life. The school affords many illustrations for these lessons. The boy who violates the rules of the playground is excluded by the others from its privileges, and the pupils cannot but feel that justice has been meted out to him. The child that abuses any privilege of the schoolroom is deprived of that privilege, and so on. Further than this, it is occasionally well to let children carry out some pet scheme which the teacher knows can but result in failure, in order that they may learn from experience that they were led into it more by sentiment than by judgment.

Responsibility strengthens character. Weak and troublesome boys are always strengthened by giving them positions of responsibility requiring the exercise of the virtue corresponding to their vice—which is always the negative of some virtue. Falsehood, for instance, is the negative trueness.

The greatest weakness in the training in responsibility has been to teach only responsibility for evil. The moral training of a child is not well begun till he clearly sees his responsibility for the good he can do. There may be little vital moral power

in knowing our responsibility for the wrong we do, but there is great propelling vitality in the consciousness of our responsibility for the right things we have special power to do.

The law of self-control is usually treated as the power to keep away from wrong. A man may keep away from all forms of evil and be of little use to God or to humanity. True self-control means power to control all our powers in the achievement of right things.

27. Truthfulness. Most children intend to be truthful, but they do not always know what truthfulness means. This they should be taught by precept and example. In the first and second grades the untruths told by the pupils consist chiefly in exaggerations due to the child's active imagination, lack of judgment and failure to observe carefully. About the only attention such statements need is such as is necessary to set the pupil right as to the facts. He has no intention to deceive, and with the development of the child's mental powers the fault will in most cases correct itself. Deliberate falsehoods, prevarication and other forms of intentional deception are, however, of a more serious nature, and these need careful attention.

(a) **LYING.** What is the difference between a lie and an untruth? How many of your pupils have ever thought of this? By the time they reach the third grade they are old enough to understand this difference, and many of them understand it before that time. However, it is safe at the outset to call attention to this difference, and to emphasize it by several illustrations. A lie is a statement known to be false and made for the purpose of deceiving the one to whom it is told. A lie is deliberate, is premeditated, and is told for a dishonest purpose. An untruth is a misstatement or a wholly erroneous statement supposed to be true by the one who makes it. The teller of an untruth usually has no intention of deceiving, therefore he is not at fault to the extent of one who tells a lie. However, the teller of an untruth may be far from excusable. He is responsible for his statements, and if he has been careless in his observations,

or has neglected opportunities for gaining exact information about the subject concerning which his statements are made, he is at fault, and in a large measure is inexcusable. In the discussion of the difference between a lie and an untruth, this point should be strongly emphasized.

Another point which the teacher should carefully consider is the reason for children's lying. Usually the cause is one of the points mentioned below:

(1) *The Influences of the Home.* If the other members of the household lie, the children will lie, and they may be so accustomed to the practice that they see no harm in it.

(2) *Fear.* The child has done something wrong, and the fear of punishment leads him to defend himself by lying. A large proportion of the children who resort to this device receive harsh treatment at home.

(3) *Revenge.* Children will lie to those whom they do not like, to "get even" with them, when they would not think of lying to anyone whom they love. The teacher who is disliked is the target for many lies of this kind.

Lying is more or less common in all schools, and the teacher should do all in her power to stop it. Having learned the causes, she is in position to use preventive measures which will do away with much of this evil practice. There will be cases, however, that will need special attention, and these must be dealt with according to their individual needs. A method that will be successful with one child may utterly fail with another, therefore no specific methods of treatment are given. In general, we would say: Avoid all harsh measures; treat the offender kindly but firmly; always get at the truth in the matter, if it requires days or even weeks to do so, then show the offender the folly of his act. A lie is sure to be found out, and when discovered it places the one who told it in a much worse position than he would have been in had he told the truth at first.

Give talks on the value and importance of truthfulness. Lying is cowardly; the man who lies seldom has moral courage, and little, if any, physical courage. Children, boys especially,

despise a coward; it appeals to their manhood to tell the truth. On all occasions create a school sentiment against falsehood; then in every way possible help the pupils to maintain the high standard they have set up.

Show by anecdote, talks and illustrations the importance and value of keeping one's word. So many illustrations of this are to be found in business life that they can always be found near at hand. If men in general were not truthful, business could not be transacted by the methods now in vogue.

(b) EXAGGERATION. Exaggeration is a form of misrepresentation, due in the beginning to a vivid imagination which is not controlled by good sense. It is quite common in children, and if allowed to continue without restraint it often becomes a habit of such strength that its possessor is unable to give an accurate account of anything. Such people are usually dubbed "professional liars," and their statements are never believed unless verified through other sources. Unfortunately, every community usually has one or more members who are forcible illustrations of what the practice of exaggeration leads to. Pupils who are inclined to exaggeration should be warned to think before they make statements; if the statements are incorrect, ask the pupil to verify what he has said, by observation, or by consulting books, or by asking those who are older and who from experience can give the exact facts. Show the folly of such misstatements and that they are of little value, if not entirely worthless. Create a sentiment against them and occasionally let those who are persistently careless be laughed out of court.

(c) PREVARICATION. The original meaning of the word *prevaricate* is to straddle. The prevaricator is one who dodges the question, hoping thereby to escape the consequences of his connection with the matter in hand. It is only another form of deception and is usually due to fear, or to the persons' high estimate of his own shrewdness. It is only another form of lying, and should be treated in the same manner. People have but little confidence in or use for those who

are not willing to face the consequences of their own acts. Lead the pupils to see that the prevaricator is no more esteemed in society than the liar, and you will start a train of influences that will tend to break up this practice in your school.

(d) SLANDER. Slander is without question the worst form of falsehood, since it has for its object the injury of another. We have already referred to this briefly, but it is of such importance that it demands further attention. In almost every school there are cliques, particularly among girls, the chief business of whose members is to tell what they have heard to the discredit of someone outside their circle. By taking the matter in hand early in the term, the teacher can frequently prevent this practice by giving the pupils something of interest to occupy their thoughts and time out of school hours.

You cannot emphasize too strongly the baneful influence of gossip, which soon degenerates into slander. Whatever one is tempted to tell about another should first be subjected to the following tests: First, do you know from personal knowledge that what you are to tell is true? Second, if true, will telling it do you or the one to whom it is told any good? Third, will what you are about to say injure the person about whom it is told? If all tale-bearing were thoughtfully subjected to these tests, it is safe to say that the most of the slander now so thoughtlessly uttered would never be heard.

Who steals my purse, steals trash; 'tis some-
thing, nothing;
But he that filches from me my good name
Robs me of that which not enriches him,
And makes me poor indeed.¹

He who saves another's character is a greater benefactor than he who saves his life.²

28. Honesty. Honesty and truthfulness are inseparable. To lie is dishonest; if one's word cannot be taken, one cannot

¹ Shakespeare: *Othello*.

² Horace Mann.

be trusted in other things. The most flagrant forms of dishonesty are usually known to the pupils, and will need but little attention. The tendency to deceive in little things and the temptations to dishonesty in school work are the forms of dishonesty that will need special attention. It requires many lessons and illustrations to convince some children that intellectual honesty is as important and as highly valued as honesty in regard to material things. Many young people who would never think of taking so much as a penny belonging to another will not hesitate to appropriate the work that a classmate has done in solving a problem, writing an essay or even an examination, and to do this without giving the original worker any credit whatever. Lack of proper training in the lower grades is doubtless responsible to a great extent for this condition. Train pupils to realize that any form of deception is dishonest, and that honesty has a far broader application than that which restricts it to material things. While pupils should be trained to be absolutely honest in all their dealings with other people's property—that of their schoolmates, the teacher, and the school—they must be trained to be just as honest with other people's time, reputation and work, as well. The boy who engages to work a given number of hours a day for a stated wage, and spends a portion of it loafing or at play, or who stops work before the end of the day, is dishonest; the trader who gives short weight or measure is dishonest; the one who squanders public property, or fails to fulfill his contract in doing public work is dishonest: the one who "drives a sharp bargain", knowing all the time that he is receiving more than full value for what he gives in exchange, is dishonest, even though he may be protected by the law; and the one who tries to injure another's reputation is perhaps the most dishonest of all. These facts should be dwelt upon until they become firmly fixed in the minds of the pupils. Above all, create in your school a strong sentiment against all forms of cheating. The boy who cheats in school will become a cheat and a trickster in business. Show by talks, illustrations

and stories, the force of Franklin's saying, "Honesty is the best policy."

Caution. In dealing with such topics as truthfulness and honesty you may touch closely upon the traits of some pupils who are habitually untruthful and dishonest. Great care should be taken to make these talks impersonal, and to draw illustrations from such sources that no one's feelings can possibly be injured by them. You should also see that the other pupils do not mistreat those who are so unfortunate as to have these habits fastened upon them. Such children should be treated kindly and helped to overcome these habits.

29. Industry. Persistent, hard work is necessary not only to the accomplishment of the school tasks but also to the development of character. Children should be trained to do things because the doing of them is right, and because it is necessary to the welfare of the child or someone else. Play has its place, and an important place it is, in the life and work of the school, but work should not be turned into play, and the distinction between the two should be carefully drawn. Most children enjoy work as well as play, provided the tasks assigned appeal to their interests and are within their ability. In a school where the work is properly planned there is little evidence of idleness. Again, industry is the best means of discipline. So long as the pupils are kept busy on the regular work of the school, they find no time for other things; once allow them to become idle, they fall into mischief.

Training pupils to industry in school is not difficult, but placing them in a right attitude towards labor in general is a different task. The tendency to look down on those who work with their hands is altogether too prevalent, and is wholly vicious in its influence. Children need to learn and to feel the dignity of labor. It is only through labor that the work of the world is accomplished. It is through labor that we are supplied with food, clothing, shelter and all other things necessary to our comfort and happiness. Labor is essential to life. All living things—plants, animals, birds, insects—work incessantly that they may live. Give numer-

ous illustrations of this, drawing them from your immediate surroundings. In the last analysis, the men and women who work constitute the backbone of our social and political life, and it is an honor to belong to this great army of workers.

Through lessons on industry much can be done to link the school with the home. As soon as they are old enough, children should be assigned tasks in the home, and should be held responsible for the daily performance of these duties. In many homes, however, this is not done, and the children grow up without any sense of responsibility concerning the household. The farm home of early times, in which every member had his round of duties, from the performance of which only illness would excuse him, was one of the most powerful forces in character building the country has ever known, and its passing is much to be regretted.

A special exercise on Labor Day may be used to introduce lessons on industry. With these exercises as a foundation, talks, illustrations, stories and selections for memorizing can be used from time to time to keep the thought before the pupils throughout the year.

There is an ethical value in activity. "An idle brain is the devil's workshop" is not only a true saying, but a truism. While an active child may become a doer of evil, his chances of such an outcome are not one per cent of those of the lazy, idle boy, whose life is a ready prey for the invasions of the infesting vermin of immorality. There is hope for the active man; for activity is the essential principle of life.¹

30. Conduct. All children like to be considered ladies and gentlemen, and if treated as such they usually respond with like treatment. Young people often place themselves in awkward, if not unpleasant positions, because they do not know what to do, therefore lessons on politeness in public places are not only helpful, but desirable. Teach children what becomes one who is well bred and the lessons will be of value to them through life. If you are well bred—

¹ Preston W. Search.

- (1) You will be kind.
- (2) You will not use slang.
- (3) You will try to make others happy.
- (4) You will not be shy or self-conscious.
- (5) You will never indulge in ill-natured gossip.
- (6) You will never forget the respect due to age.
- (7) You will not swagger or boast of your achievements.
- (8) You will think of others before you think of yourself.
- (9) You will be scrupulous in your regard for the rights of others.
- (10) You will not measure your civility by people's bank accounts.
- (11) You will not forget engagements, promises, or obligations of any kind.
- (12) In conversation you will not be argumentative or contradictory.
- (13) You will never make fun of the peculiarities or idiosyncrasies of others.
- (14) You will not bore people by constantly talking of yourself and your affairs.
- (15) You will never under any circumstance cause another pain, if you can help it.
- (16) You will not think that "good intentions" compensate for rude or gruff manners.
- (17) You will be as agreeable to your social inferiors as to your equals and superiors.
- (18) You will not sulk or feel neglected if others receive more attention than you do.
- (19) You will not have two sets of manners—one for "company" and one for home use.
- (20) You will never remind a cripple of his deformity, or probe the sore spots of a sensitive soul.¹

To these, add that it is rude—

To attract attention by loud talking or laughter in public places.

To be impolite to public servants, such as trainmen, street

¹ These twenty precepts are taken from *Success Magazine*.

car conductors, and others whose duty it is to look after the welfare of those who travel.

To occupy more space than necessary in a public conveyance when others are standing.

To dress in such a manner as to attract attention.

To annoy others by whispering or talking in public assemblies.

31. Self-Control. "He that ruleth his spirit" is better "than he that taketh a city." We have already seen that in childhood and early youth the emotions are in the ascendency, while the will and the reason are slowly assuming their sway. It is not, therefore, unusual for children to become angry on slight provocation, or to give way to grief for what seems to us to be trivial causes. Nevertheless, these causes are to the child all-powerful. Break the little girl's doll and the world breaks up with it; lose the boy's ball and to him the world is lost. The teacher should take cognizance of these conditions, and so far as possible prevent these outbursts of passion, for every time the child gives way to anger or grief he strengthens the tendency to do so again. Prevention, therefore, should be used more than positive instruction in the primary grades. As the children advance, however, they should be encouraged and helped to exercise self-control. As pupils are able to understand the meaning of the term, its application should be broadened until it is understood that complete self-control is that which controls the thought that is back of the act. It is not only necessary that the boy control his impulse to hit his fellow, but that he control the thought back of the impulse.

Show that self-control often calls for the highest kind of courage; that only men of self-control are of use in great emergencies; that the best men and women with whom the pupils are acquainted are those who are able to control their actions on all occasions. Ask pupils always to think before they act upon impulse; to strive to emulate such men as Stevenson, Nelson, Wolfe, and hosts of others whose self-control was one of their leading characteristics.

32. Love of Country. The State maintains public schools to educate for citizenship. Stories of the boyhood of great men, of the adventures of early pioneers, and of the customs and manners of the early settlers in this country, together with their trials and hardships, should begin in the last half of the first year and continue until the pupils are ready to take up the study of history. In addition to these, have the second and third grades memorize short selections expressing patriotic sentiments, and teach *God Save the King*, *The Maple Leaf*, and *O, Canada*. More difficult songs will be added, of course, in the more advanced grades. In these grades, also the sacredness of the ballot, one's duty to vote, and honesty in public affairs should be strongly emphasized. Much of this work will naturally be done in connection with the work in history and civil government.

33. Pupil Government. The ultimate end of all government and moral training is to make the child a law unto himself. Forbush tells us that boys are divided into two classes, "the you-must boys and the I-must boys." To develop within youth a quick and sensitive conscience, and to establish habits of right action, so that the conscience will be a monitor that will always be obeyed, is the most important work of the school. The development of the feeling of responsibility is recognized to be of such importance in building character that numerous plans have been perfected for placing the government of the school in the hands of the pupils. In some of these plans the third grade is included, while in others the plan is confined to the higher grades. In no system does it include the first and second grades. It is claimed for these plans that they throw the pupil upon his own responsibility, and at the same time give him a most practical training in citizenship. Among the most effective of these plans are the School City and the George Junior Republic, established at Freeville, N. Y., in 1895, by Mr. William R. George; and the Citizen and Tribune plan originated by Principal John T. Ray, of the Ryerson School, Chicago. This latter plan, instituted by Mr. Ray as an experiment,

has proved so successful that it has been adopted by numerous other schools. It was recently adopted by the Board of Superintendents of Greater New York, and within ten years from the time of its adoption it was in use in schools whose combined enrollment exceeded 350,000. It may be used with success in any school, provided the teacher has tact and patience, and wherever it is used it is found to be one of the best means for developing character in the pupils. The following extract from an article by Mr. Ray, in *School and Home Education*, gives a concise outline of the plan and states the benefits derived from it:

In the first place, the plan should not be considered as a plan of "pupil government." The schools using it are still under the direct control of the teacher and principal, especially in the laying down of rules and regulations for the school and in the administration of all penalties and punishments for disobedience or wrong conduct that tends to thwart the purpose of the school or the rights of individual members.

What, then, it may be asked by some, is there left for the pupils to do in the way of government of the school?

The pupils are charged with the general movements of the pupils in and about the school outside of the teacher's classroom. They are taught to see that the rules and regulations are enforced, and that the rights of every pupil in and about the building are respected. They are taught that this enforcement is not only their duty, but that it is to their general welfare and interest to do it, just as in later life it is the duty of every good citizen to see that law and order, honesty, and square dealing are the general practice of the community in which they live. They are taught how to do this along three distinct lines:

First. They exercise personal self-control without being watched. Their conduct out of the presence of the teacher must be as exemplary as in her presence.

Second. The pupils are taught that they have a public duty to the school as a whole, and that personal right conduct is not all, but that they must actively exercise—the same as the teacher is expected to do—an influence for right over their fellow pupils. They are taught that no good citizen of a school, any more than of the adult community, is doing his full duty if he becomes an idle looker-on at misconduct in others that affects the welfare of all.

Third. They are taught how to organize, and, by the authority of their elected officers, tribunes and marshals, control the wayward

and thoughtless, who are always only a small minority. The pupils have long since discovered that it is to their interest and welfare to do this. It is the business of the teacher to show them how this may be done. The following results show clearly in the general condition of the school:

(1) Pupils have learned that if they create a sentiment in the school for right conduct but very few will fail to respect that sentiment. These, if they will not submit to the mild influence and admonition of the school officers, backed by the majority who demand it, are dealt with by the teachers, and are isolated from association with their fellow pupils whose rights they refuse to respect.

(2) They have uprooted from the school the old and pernicious idea that pupils should hide from their teacher all misdeeds. They see clearly that it is the right and honorable thing to see that wrong acts are exposed, alike for the good of the offending individual, the general welfare of the school, and their own personal welfare. In other words, they have learned the distinction between idle "tattling" and a manly exposure of misconduct for the purpose of correcting it.

(3) The habit of sly, mischievous and disturbing tricks when not observed by the teacher has practically disappeared, for the reason that the disapproval of their fellow pupils is sure to make itself manifest, and exposure will follow.

(4) Fighting, nagging and annoying other pupils who are timid or smaller has been entirely stopped. The older pupils take a pride in performing this duty voluntarily, and the presence of the school officers everywhere affords the means of at once stopping it. A fight or the encouragement of a fight has not occurred about the school in several years.

(5) Cheating and wilful misrepresentation in connection with school work is driven out of every grammar room in the building by the pupils themselves, who act through their tribunes in quietly warning the offender to desist or exposure will follow.

(6) The pupils of a room have, as a rule, acquired the habit of going on with the work of the room as promptly and properly when the teacher is absent as they would if she were present. In other words, during the school hours the room is constantly organized for work and orderly procedure, it being the duty of one of the two tribunes to either take charge, or appoint some one to take charge, when the teacher is absent or out of the room temporarily. This is quite as true of the conduct of a first or second grade as of the highest. It has become a habit of the pupils throughout the school.

(7) They have learned the act of careful and thoughtful selection of competent, discreet tribunes. When they find such a boy or girl, he or she is re-elected, often several months in succession. The

pupils as a whole respect the wishes and suggestions of the tribune, and, except by new pupils transferred from other schools, the tribunes are treated with as much respect as are the teachers of the school.

(8) It has been found that the tribunes, acting through the marshals they appoint, can as efficiently and quietly regulate the passage of the pupils on the stairs, the forming of the lines, and the general deportment and conduct on the playgrounds and in the basement as did the teachers when they were required to do these hall, basement and playground duties.

(9) The public installation of the tribunes each month and the formal recognition by the teachers of satisfactory conduct and good influence of individual pupils, has a very salutary effect. To be made a "citizen" of the room and school by the teachers, and the formal presentation of a "citizen pin," is the ambition of most pupils, and in the lower grades especially it is a powerful incentive. No more severe penalty can be put upon a child than to say to him, "By your lack of self-control and proper influence for right you are no longer worthy of wearing that pin." The child, as a rule, tries to so conduct himself as to be worthy of having it restored to him at the end of the month.

(10) The lifting from the shoulders of the teachers the unpleasant duties of standing guard on the stairs eight times a day, and of doing hall, basement and playground duties at morning, noon, and recess, summer and winter, is one of the pleasurable, direct benefits to the teacher, and hence to the school. Her health is preserved and her energies conserved for the legitimate duties of the schoolroom. The government during the school hours is much less a burden. The teacher gets the same relaxation, rest and liberty at morning, noon and recess as do the pupils, and comes to her work in the schoolroom rested and refreshed as much as the pupils.

In conclusion let me say, let no teacher feel that there is a chance to throw off unpleasant duties. There must be only a change from that of doing police duty to that of daily guiding, directing and teaching the pupils how to conduct themselves and to control others. There come to the teacher new duties that she must study and learn how to skilfully execute. The teacher who thinks that this or any other plan of self-government can be instituted without careful study and forethought and a high determination to teach her pupils how to be self-controlling, law-abiding, law-enforcing members of the school, had better never undertake the task.

34. Aids. The following books will be helpful to teachers:

Character Building. Marion George. 2 volumes. A. Flanagan Company, Chicago. This work is replete with subjects for morning

talks, stories, maxims, and selections for memorizing, and is well-nigh indispensable to the teacher who wishes to give special exercises in moral training.

The Young Folks Book of Etiquette. A. Flanagan Company, Chicago.

The Boy Problem. Forbush. Pilgrim Press. Boston-Chicago.

Moral Training in the Public Schools. Ginn & Co., Chicago.

Pupil Government. John T. Ray, Ryerson School, Chicago.

TEST QUESTIONS

1. Why do the home conditions of today differ so widely from those in the days of our forefathers? Show why this is an argument in favor of introducing moral training into the schools.

2. Show specifically how the story of *The Ugly Duckling* or *The Lion and the Mouse* contributes to the moral training of the pupils.

3. In general, what plan for moral training should be used in the first grade? Give reasons for your answer.

4. Show how the teacher is an important factor in moral training.

5. Do you consider Mr. Ray's plan of government pedagogically sound? Give reasons for your answer.

6. Show how you would impress upon the pupils of a third grade the fact that moral courage is greater and more to be desired than physical courage.

7. Can you form any societies in your school that will assist in the moral training of their members? If so, name them and state how you would proceed to form the organizations.

8. Show how the condition of the schoolhouse and grounds and the condition of the schoolroom help or hinder in the formation of character.

9. Give an outline of a talk on *Honesty* which you would give to a third grade class.

10. Name at least ten topics on character building suitable for morning talks to a third grade.

CHAPTER NINE

THE SCHOOL AND ITS ENVIRONMENT

1. Introduction. No period of the child's life is more important than the first few years in school. During this time the impress he receives affects his entire future, and what this impress shall be depends more upon the teacher than upon all other influences in his school life. The responsibility thrust upon the primary teacher is such as to demand the best she can give, and in order to meet this responsibility a thorough preparation for her work is necessary.

In the physical world, whenever growth ceases, dissolution and death follow, and this is equally true in the realm of mind. Having the attitude and spirit of a learner brings every teacher into closer sympathy with her pupils, and for this reason, if for no other, the sympathetic pursuit of some subject is always desirable. Moreover, the teacher needs to grow continually, that she may be able to meet the obligations constantly imposed upon her. School relations are daily becoming more complex; new subjects are being added to the course of study; methods and devices are being multiplied, and the number of different text-books on the various branches is confusing. With all new subjects, new devices and new text-books, the teacher must have more than a passing acquaintance, or she will soon fall behind her more progressive rivals.

Through complex conditions and increasing difficulties the teacher must see clearly her way. She must be able in the shortest time to secure the best possible results. In order to do this she needs to know the educational value of each branch to be taught, and she must understand that all subjects are taught in accordance with well-defined fundamental laws. They are therefore taught alike, the apparent differences being due to the devices necessary to secure the application of these laws to the various subjects. The induc-

tive method of teaching geometry and the observational method employed in nature study in a primary grade follow the same laws; the apparent difference in method is in the subjects to which these laws are applied. When the teacher comprehends this truth, she ceases to be an imitator and throws her personality into her work.

All the preceding lessons emphasize this great principle of teaching. They assume that the student possesses a thorough knowledge of the branches to which the lessons apply, and they discuss the application of the laws of child psychology to the teaching of these branches.

2. The Problem. When a teacher has secured her position, the situation resolves itself into a problem somewhat like an example in mathematics, inasmuch as its solution depends upon answering these three fundamental questions: (1) What is given? (2) What is required? (3) What are the best methods to employ in order to secure the desired results?

The factors involved are the schoolhouse and grounds, the school furniture, the pupils, the patrons, the school authorities and the teacher. The requirements are that the teacher, with the conditions under which she must work, train the pupils given her in accordance with the requirements in the course of study; and that she do this in such a manner that their lives will be brightened and the foundations of right character will be laid.

The lessons in this work are devoted to the answer of the third question. What are the best methods to employ?

3. The Schoolhouse. Teachers seldom have any voice in the location and plan of the schoolhouse; and in graded schools the general care of the building devolves upon the principal. In one- and two-room buildings, however, the teacher is responsible for the proper care and management of the building, and she is responsible always for the care of her own room. This does not mean that she is to do the janitor work, but it does mean that she should hold those who care for the room responsible for keeping it clean;

and also that she should so arrange the furniture and decorations as to make the room as convenient and attractive as possible. In doing this, there are a number of matters to consider. These are (a) seats, (b) heating apparatus, (c) ventilation, (d) lighting and (e) general condition.

(a) SEATS. The proper seating of a schoolroom includes the selection of seats which are in size adapted to the size of the pupils. In rooms having more than one grade, there should be at least three sizes of seats, and in others two sizes. If the teacher finds a room so seated, the pupils can usually be properly located without much difficulty. But satisfactory conditions are not always found in country schoolhouses or in the school buildings of small towns.

In assigning a seat to a pupil, two things should be considered—the height of the seat and the height of the desk. The seat should be of such height as to allow the feet to rest naturally upon the floor, and the desk should be of a height that allows the book to be at least eleven or twelve inches from the eye. For larger children fourteen inches is a better height. The height of the desk is as important as the height of the seat, for if the book comes too near the eye its continuous use in this position is liable to cause the pupil to become near-sighted.

Seats of the same size should be set one behind another, in the same rows. The mistake is occasionally made of placing the higher seats in the rear, and the lower ones in front, in each row. This arrangement is defective, because, when the small seat is placed in front of the large one, it either brings the seat too high or the desk too low for the pupil occupying it. If the defects are serious, the teacher should try to secure a resetting of the seats so as to place those of the same size in the same row. This can usually be secured when the proper authorities—principal or school officials—are thoroughly convinced of its necessity. If a portion of the seats are of an adjustable pattern, this usually enables the teacher to seat all pupils so they will be comfortable, without rearranging the seats.

It is not always possible to seat the pupils so that all will be located in seats of the proper size. When the seats are so high that the children's feet do not touch the floor, the difficulty can be remedied by the use of foot-rests, which may be made of small boxes covered with carpeting or some other material, to prevent noise if they are moved upon the floor; where several seats in a row are too high for the pupils, a board nailed upon joists to make it of the proper height may be extended under them all. Oftentimes a piece of two-by-four will answer all purposes. The ingenious teacher will discover inexpensive and effective devices for making her pupils comfortable.

Cautions. (1) In addition to adjusting the seats to the children, two other conditions should be borne in mind in seating the school. Children who are defective in sight or hearing should be seated near the front of the room, where it is easy for them to hear the teacher and see the black-board.

(2) Children thinly clad, or whose physical condition is such as to demand a higher temperature than the average, should be placed in the warmer parts of the room.

(b) HEATING APPARATUS. All large school buildings are heated by steam or by furnaces which are under the direct management of a janitor, but the teacher may be directly responsible for the management of the heating apparatus in small buildings, whether heated by a furnace or by a stove. A comfortable and even temperature is essential to the successful working of the school, and, whatever the plan for heating, it is the teacher's duty to see that such a temperature is maintained. The temperature of the room should not be allowed to fall below 65°, nor to rise above 70°. Reliable thermometers should be placed in different parts of the room, and they should be read at frequent intervals. If a stove is used, it should be enclosed in a jacket. If there is no jacket, a screen of galvanized or sheet iron should be placed so that it will protect the pupils sitting near the stove from excessive heat.

Caution. In well-constructed schoolhouses, the halls and cloakrooms are warmed. In buildings where the cloakrooms are not heated in cold weather, the children's wraps should be brought into the schoolroom at dismissal and put on there instead of in the cloakrooms. This need not cause confusion, nor create a spirit of disorder.

(c) VENTILATION. Warming and ventilation are so intimately associated that the teacher needs to study them together. The ventilation of most schoolrooms is a difficult matter, because proper ventilating appliances are not provided. It is essential that the schoolroom be supplied with an abundance of fresh air heated to the proper temperature. Failure to secure this result leads to restlessness and inattention on the part of the pupils and prevents satisfactory work by the teacher.

The heating and ventilating apparatus in a large school building constitute a unit, and must of necessity be under the direct management of one person. In such buildings it is the teacher's duty to notify the one in charge of the apparatus if her room is not properly warmed or ventilated. Opening doors or windows in one room may so change air currents within the building as to interfere seriously with heating and ventilating other rooms; therefore, the teachers should not assume this responsibility.

The best means of ventilating a schoolhouse heated by stoves is by a jacket around the stove. This device consists of an ordinary stove surrounded with a sheet-iron, tin or zinc jacket, which comes within a few inches of the stove, is open at the top, extends to the floor and fits closely up to the stove near the door so that it is left free for putting in fuel. Immediately under the stove is a hole leading to a fresh-air duct which leads beneath the floor to the open air. As the air within the jacket becomes heated, it is driven out at the top and is replaced by fresh air coming in through the duct under the door. When the heated air reaches the top of the room it flows in all directions, gradually settling to the floor as it comes in contact with the walls. An escape

for foul air placed near the floor in the chimney, which should extend to the ground in this case, provides for a complete circulation, and with this device an equal temperature can be maintained in all parts of the room and an abundance of fresh air is always supplied. This device is not expensive and is wholly successful. Its installment more than pays its cost in the prevention of drafts and saving of time which otherwise must be taken for airing the room at frequent intervals.

If the room is warmed by an ordinary stove, the most successful and at the same time inexpensive device for ventilating is a board about eight inches wide, so set at the bottom of the window casing that it will fit tightly and be about one inch from the sash. When a board is so placed and the window is raised, the air entering from outside strikes against the board and is given an upward direction so that it does not fall upon the heads of the pupils. By fitting two or three windows on each side of the room with this appliance, the air can be kept in a very satisfactory condition. It should be borne in mind that it is as necessary to secure the escape of foul air as it is to secure the entrance of fresh air. The open stove door, when the room is sufficiently warm to admit of it, enables a large quantity of impure air to escape, the draft from the chimney causing a strong current to pass through the opening.

(d) POINTS TO REMEMBER. (1) A basin filled with water should be kept upon the stove whenever there is a fire in it, to keep the air from becoming dry. Furnaces have water pans for the same purpose, and these should be kept filled.

(2) If the system of ventilation is by placing boards in the windows, care should be taken not to open the windows on the windward side of the building; that is, if a north wind is blowing, the windows on the north side of the building should not be opened; if a west wind is blowing, the windows on the west side should not be opened.

(3) Whatever system of ventilation is employed, the

windows should be opened and the room thoroughly aired at recess, at noon, and at night after school is dismissed.

(4) Study whatever system of heating and ventilation is provided, until you are familiar with its mechanism and workings; then you will be able to use it intelligently.

(d) **LIGHTING.** When possible, the light should come from windows behind and at the left side of the pupils. In case opposite windows cannot be avoided, the light should be regulated by shades of a light olive green color, adjusted so as to prevent either strong sunshine or heavy shadows from falling upon the work or into the eyes of the pupils. Holland is the best material for shades. The best adjustment is that employed in business offices, allowing the shade to be raised from the bottom or lowered from the top, as desired. Shades of good quality and of the right color, gray, green or olive, should be procured, made to fit the windows exactly, and then cared for as zealously as those in a fine parlor.

Caution. Shades made of narrow, parallel slats are not desirable, but, in case they have been placed in the school-room, their injurious effect can be greatly remedied by the use of plain white curtains between the shade and the window, or even by the use of papers placed over them in such position as to prevent rays of sunlight from falling directly upon the desks. Yellow shades are not as injurious as those made of slats, yet the light admitted through them strains the eye.

(e) **CONDITION OF THE BUILDING.** Before the opening of school, the teacher should make a careful examination of such part of the school premises as is to come under her immediate care, and she should see that everything is in order. If you are teaching in a building under the care of a principal, your oversight will include your room only. Whatever personal touches you wish to add, in the way of small decorations and arrangement of furniture, should be made at this time.

If teaching in a one- or two-room building, the responsibility and care of the entire building and the school grounds

may rest upon you. In this case your inspection should include the building, grounds and outbuildings. The building and outhouses should be thoroughly cleaned and put in perfect repair before the beginning of school. The grounds should also receive attention, and be made as neat and attractive as possible. An attractive building and grounds and a neat and tastefully decorated schoolroom make a pleasing impression on the pupils and also compel their respect for the school and its surroundings. All the time and effort that are spent upon securing favorable conditions of this nature contribute directly to the good discipline of the school and surround the children with right influences.

Caution. Many districts in small towns, and even in cities, have little or no money to spend upon decorations or furniture; when your lot is cast in one of these districts you should accept the situation cheerfully and do the best you can with the means at your disposal. You can sometimes secure the needed money by allowing the children to give one or two entertainments each year. In some communities indifference may have led to neglect of the school premises, and it may require a good deal of patient persistence to secure much needed repairs; but if you are able to convince the proper authorities that these are necessary, and if you secure the coöperation of some of the most influential patrons of the school, in due time you will obtain what is needed.

4. The School Furniture. In addition to the seats for pupils, the furniture of the room should include a desk and chairs for the teacher; settees, or other provision for recitation purposes; a long table for construction and number work; such 'charts' as the work of the grade requires; a dictionary; a closet for books, apparatus and specimens; a sand box; erasers and pointer, and such other conveniences as may be necessary for the work required. These will vary in different localities.

Somewhere in the building there should be one or more lavatories provided, even though they are furnished only with a plain bench and a common wash basin. These simple

lavatories should have one pail for clean water and another for the dirty water. Whenever the building will permit, there should be a lavatory for the boys and one for the girls. In large buildings, these conveniences are usually placed in the basement, and are cared for by the janitor. In small buildings they usually come under the direct supervision of the teacher, who should see that they are kept clean. A supply of towels for general use should be furnished by the school. It is also well for each pupil to bring a towel from home to use in case of emergency. Each pupil should also have his own drinking cup.

Every school should have an abundant supply of good drinking water. In some localities the source of supply is so far from the building that water must be brought in pails. Water should not be allowed to stand in pails made of tin or galvanized iron, because small portions of the metal dissolve in the water and render it unwholesome. Where water has to be brought to the schoolhouse in this way, an earthen crock, a wooden pail or one made of *papier mache* should be used as a receptacle.

(a) THE WORK TABLE. The work table should be eight or ten feet long and three feet wide, and of such height that pupils can work upon it conveniently when standing. For first grades this should not exceed thirty inches; for second and third grades it may be a little higher. The top should be finished with an inch guard around the edge, to prevent small pieces of apparatus from rolling to the floor.

(b) THE SAND BOX. A zinc-lined box, or one of seasoned, painted wood, to hold clean white sand should also be considered a necessity for primary and intermediate grades. A box four feet long by two feet wide and about eight inches deep is of a desirable size. It should be placed upon strong supports of a height most convenient for the pupils who are to use it. This box is a wonderful help in the early study of elementary geography.

(c) THE BLACKBOARD. Blackboards should be much greater in extent than is often thought necessary; in fact, they should

fill all the space between windows and doors around the room, reaching high enough to be convenient for the teacher, and low enough for the youngest pupil to use without inconvenience. For first and second grades they should come within eighteen inches of the floor. These boards should be of excellent quality (green in color, rather than black) and always finished at the bottom with a receiver for the crayon dust. This receiver should be about four inches wide, with an inch guard at the edge.

Cautions. (1) Boards should never be finished with a polished, shining surface, and it should be remembered that the board surface between windows is in a position very trying to the eyes.

(2) Janitors and children should be taught to clean boards in a way not to fill the room with dust. Erasers must be kept clean, and when used should be drawn from the top downward.

(3) The chalk receiver should be wiped out every night, and all the erasers should be thoroughly cleaned at least once each day.

5. The School Grounds. The best school grounds are spacious, allowing for a generous undivided yard in front, and for playgrounds in the rear of the schoolhouse. When necessary, they should be surrounded by a well-kept fence with a turnstile or some other convenient arrangement that permits entrance and exit by pupils, but excludes wandering animals. A row of shade trees along the fence, a few ornamental shrubs and some flowers planted around the trees, will go far towards making the school attractive and a source of pride to the pupils, their parents and friends. The best flowers to use for school yards are such as bloom freely and do not require much care beyond the daily watering. Among the best are sweet peas, nasturtiums, asters and phlox. These will give color and beauty to the school yard and furnish daily bouquets from early June until heavy frosts come.

The shrubs used should be hardy ones that blossom

early and freely, of which the lilac and snowball are good examples. Not many shrubs will be needed. It is better to give up most of the space to grass and keep it in good condition by having it cut and watered frequently.

If there is a school garden, a plot of ground should be set apart for the pupils of the primary grades, and they should cultivate this in common, under the teacher's supervision.

If out-of-door closets are a necessity, two should be entirely separate, as far apart as possible and opening away from each other at the rear of the school lot, with a separate walk to each. These outbuildings should be made as well as if for the best private families, and, by the unceasing vigilance of the teacher and her helpers, kept absolutely clean and free from markings or cuttings. If the buildings are whitewashed often and marks removed as soon as discovered, public sentiment among the pupils will soon demand neatness.

If climbing vines, such as woodbine or ivy, are planted around these buildings, they are soon covered with verdure, which during the summer presents a much more pleasing appearance than the bare structures.

The rear yards should be real playgrounds, and the children should be encouraged to play heartily there, except in very inclement weather. The grounds should be under the constant supervision of the teacher, who should be there to join in the play, inventing and teaching new games, directing old ones, entering heartily into all the exercise and fun, and yet preventing quarrels and accidents by a kindly watchfulness over all. A spirit of hearty good-fellowship should be instilled into the play time, and dangerous games should be ruled off the list.

Cautions. (1) Do not water the trees, grass and flowers while the sun is shining hot upon them.

(2) Do not disgrace the lawn by having any forbidding signs erected thereon, but create a pride in the children as to its appearance by training them with your own guidance

and assistance to care for it personally. What the children really care for, the citizens will respect, and trespassing will soon cease.

(3) Daily inspection, to see that paths are kept clear and that everything is neat, is a necessity, even when a regular janitor is employed.

(4) Children must be taught to respect and care for the school premises and school property as positively as they would be in the most refined homes.

(5) The pride of the pupils is easily roused to prevent littering the yards with papers, bits of food or other undesirable things. Thoughtlessness will be the rule and will be hard to overcome; but there will be little, if any, malicious harm done by primary children. Unfailing patience, tact and a good-natured firmness will accomplish everything, if the teacher remembers that time is needed for the growth of good habits as well as for the growth of trees.

(6) In this effort to make good citizens, eliminate the prohibitory "Don't!" Substitute a smiling "Please do," and note the good effect it will have.

(7) The matters discussed in this Section pertain especially to the one having charge of the school premises. In a graded school this duty devolves upon the principal. The teachers, however, are not exempt from watchfulness, or from assisting the efforts of the principal in every way they can to keep the building and grounds in proper condition. Especially should each teacher influence her pupils to care for school property with as much solicitude as they would exercise in caring for their own homes.

6. The Patrons. Every teacher needs to know something of the family life, habits, customs and occupations of the parents of those children who are under her care. Moreover, it is of great advantage to her to become personally acquainted with the parents, but in cities this is often impracticable. She can, however, by careful observation and by questioning the principal and other teachers who are acquainted with the neighborhood, obtain a comprehensive

idea of the home life of her pupils and the general characteristics of their parents. The knowledge thus obtained can be used to excellent advantage in the government and instruction of the children, but it should never be retailed as gossip with other teachers or in the neighborhood.

Cautions. (1) When you are settled in your work try to be brave and cheerful; avoid discouragements and home-sickness by keeping busy, taking brisk exercise in the open air and by the daily morning "sponge off" in cold water, followed by most vigorous rubbing.

(2) Never permit yourself to take sides in quarrels nor to repeat anything unpleasant that may be told to you.

(3) Be kindly and courteous to every person you meet, and especially so to the poorest patrons of your school, who are liable to be supersensitive over their position in life.

(4) Endear yourself to the entire community by a genuine sympathy in their pursuits, by the gentle graces of your own life and character, and, last but not least, by doing the work for which you are hired with earnestness, interest, thoroughness and skill.

(5) Disarm gossip and adverse criticism by uniform kindness and a gracious demeanor, and win the respect of the people you live among by treating them with unvarying consideration and by showing that you respect yourself. Give lessons in courtesy and self-control by example rather than by precept.

(6) Lead a blameless life and hold fast to your ideals, your trust in God and your faith in your fellow creatures. In this way you are sure to get the best help from your neighborhood and leave it better than you found it.

7. The School Officials. In the Dominion of Canada, a board of officials, chosen by popular election, constitutes the center of every local school system. This board is given different titles, in different places; as, board of education, board of trustees, school directors, etc. The teacher's relation to this board of control depends very largely upon the school system under which she is working. In cities and

large towns she has very little to do with the school officials, because the principal or superintendent, as the case may be, is the official to whom she should apply whenever she needs assistance. In rural schools, however, and in village schools which have no principal, the teacher should consult the school officials for such information, advice and assistance as she needs at their hands.

Others in the district may be as competent as they, but these are the ones to whom the public has assigned the task of watching officially over the school. They have been chosen as public counselors for the teacher, to help her by advice when difficulties arise, to warn her when hidden shoals and quicksands threaten to wreck the frail boat she is trying to steer safely through unaccustomed waters; they are the ones to whom she may frankly confess her aims and her limitations; they are the ones to weigh and consider the facts of any troublesome school case and adjudicate without prejudice. Hence, to them should the teacher turn for help in local matters.

8. The Superintendent, Inspector or Director. In some way every teacher is related to some superintendent. In cities and towns it is the local superintendent; in rural districts, the county superintendent. The superintendent is the educational head of the system of schools under his charge, and he is usually thoroughly conversant with educational matters. He is employed to supervise the work of the teachers, and to render them expert service and advice when needed. It is his duty to see that the work of the schools is kept up to grade; that the prescribed course of study is followed, and that the best methods of instruction are employed.

The function of the board is to look after the material welfare of the school. The educational interests are largely in the hands of the superintendent. He is the logical adviser in all questions relating to the course of study or methods of teaching, as well as in management and discipline. Not infrequently in towns and small cities the board delegates most of its authority to him, and he then becomes their

agent for engaging teachers and for the administration of all school affairs. This is not usually true of the county superintendent, whose powers are limited by law but are sometimes even more comprehensive than those of a city superintendent.

As a matter of self-protection, one of the first things to be done by a teacher is to ascertain clearly her relation to the superintendent and to learn definitely his powers. She is then on firm ground and can easily adjust herself to conditions.

In a small town the superintendent is accessible at almost all times and even may be daily in communication with the teacher. In such instances they can work together to mutual advantage, and the willing and intelligent support of the teacher will receive its reward in cheerful assistance. Frequently it is true in rural schools that the teacher will not see the county superintendent more than once in a term, and so may have little opportunity to make his acquaintance. But when he does appear his experience is such that he is doubtless able to give a great deal of assistance, and he is willing to advise in the troublesome questions that have arisen. In most cases where he cannot be seen, a letter of inquiry receives prompt and cheerful attention.

Usually there are sundry reports required of the teacher, and these should always be made out promptly and accurately and mailed or delivered on the date specified. These reports are probably based upon the school registers and records, which, it is unnecessary to say, are always to be kept accurately and fully.

Cheerful compliance with the requests of the superintendent, regular attendance upon teachers' meetings when they are accessible, and activity in the educational interests of the county or city always speak well for the teacher and interest the authorities in her success. Much of the reputation which leads to advancement in the teacher's profession is created in ways of which the beginner is almost uncon-

scious. Therefore, whatever care is expended in guarding the larger relations of school life will almost certainly be rewarded.

Cautions. (1) Be alert and self-reliant, and within the limits of your jurisdiction adjust your own difficulties as far as possible. If in doubt about your authority, ask your principal or superintendent before proceeding.

(2) Be careful about taking the time of your principal, superintendent or school officials unnecessarily. Make notes of things needed from time to time, and when you call upon the proper authorities settle as many points as possible at one call.

(3) Give to principals, superintendents and school officials the deference and courtesy due to their offices. As long as you remain under their supervision, work in harmony. Should this ever become impossible without sacrificing your self-respect, resign.

9. The Pupils. If you teach in one of the primary rooms in certain sections of Toronto or Winnipeg, or any large city, you may expect to meet a great variety of nationalities—almost as many, in some instances, as there are pupils. Children with all shades of complexion and of hair and eyes, children wearing all sorts of clothing and in all stages of enlightenment—or of ignorance—and representing every sort of temperament known, would be there the first morning of the term, awaiting your advent, ready to pronounce judgment upon you even before you have had time to remove your wraps and call the school to order.

The manifold perils of a great city demand a constant alertness, a rapidity of judgment and a knowledge of ways and means so unchildlike as to seem positively uncanny. On the way to school the city child has railroad and street car tracks to cross and meets automobiles, bicycles, carriages, drays, equestrians, pedestrians and numberless other dangers incident to a crowded thoroughfare to avoid. All these are unknown to the country child, who takes his way leisurely along the road, slowly absorbing the cheery song of the

birds, the beauty of the wayside flowers, the radiance of the sky, the purity of the air, with no one to molest or make afraid. Teachers located in the small town, in the outskirts of a city, or in the country, will be met by boys and girls with bright eyes and rosy cheeks, happy in heart and face—in short, by natural children, normally developed, and not by the half-starved, weazened-faced, prematurely old, wholly pathetic little beings that come up in the congested sections of great cities.

Childhood is a most perplexing problem, a bundle of wondrous possibilities and contradictions, even when untoward circumstances do not interfere to add unnatural complications. In every school there will be a great variety of temperament, unequal advancement, and differing home life for you to grapple with. But for the most part, there will be a spirit of friendly welcome to greet you, and eyes will look frankly into your own. In some cases the little ones will be full of timidity and shyness, but there will be no actual fear and no covert slyness.

In this little human garden there will be very few rank weeds to eradicate. You will find the soil clean and adapted to the good seed you are to sow therein and nurture into the beautiful blossoms of a fine courtesy—into the full fruitage of a beautiful character.

10. The Teacher. Where do you find yourself on this first morning of the term? Is your Child Garden located among prosperous, native-born Canadians, or is it in some little, struggling community of foreigners, most of whom speak French, Italian, German or some other tongue so unfamiliar to your ear that it gives you a homesick thrill to hear it? Are the little ones well clothed, clean and tidy, or do they bear the unmistakable evidences of poverty and gross neglect? Be the locality and environment what they may, the Child Garden is ready, and the eager, wondering little people are waiting to welcome the new gardener!

(a) CHARACTER. What is the new teacher like? Is she smiling or does she frown? Is she prettily dressed or care-

lessly clothed, without regard to whether the color and cut of her garments are suitable and becoming? Is there a flower in her hand or a ferule? Is her hair becomingly dressed or untidy and neglected? Are her teeth and finger nails clean and well cared for? Is her collar clean and white? Is her voice pleasant and well modulated, or strident and irritating? Can she laugh, and will she let the children laugh sometimes? Will she be a lovable friend or a hard task-mistress?

All these questions, and many more, are vaguely flitting through the little brains as the teacher appears. Human nature is the same the world over. Children instinctively love beauty, cleanliness, tidiness, becoming clothing, friendly smiles, pleasant voices and cordial, cultured manners, as they instinctively turn from the opposites. Their intuitions are so keen and their sensibilities so acute that they are seldom deceived by any outward pretense. While they are quickly attracted by grace of form and beauty of feature, they speedily detect shams, and unless the outward charms are sustained by inward loveliness, they will turn away to cling to the teacher through whose rugged features shines that beauty of soul that constitutes loveliness.

(b) PERSONAL APPEARANCE. No one is to infer that perfection of form and feature are to be held lightly. It is not true. Beauty is a gift to be thankful for and not to be depreciated. But there is a beauty of spirit greater than physical beauty alone, a beauty causing one to forget irregularity of outlines, a beauty that by its irradiation seems to replace ugliness with loveliness.

All may not possess or command the beauty that comes from physical perfection and fine raiment. But it is the right, the privilege and the duty of every teacher to make the best of the gifts she does possess, to keep her physical, mental and moral self at that high tide of health—which alone gives permanent beauty.

And it is the right of the poorest district to expect to see a teacher who is normally developed, healthy, vigorous

in mind and body, energetic, courageous, cheerful, sympathetic, absolutely clean and tidy, and becomingly dressed.

The schoolroom is a place for business, and the attire should be suited to the work to be done. Materials need not be expensive, and the clothing will always be suitable and becoming if neatly made and chosen carefully with reference to color and pattern. Little touches of color are almost a necessity in primary rooms, where the children hunger and thirst for beauty as flowers for the sunshine and dew. But the color may best be supplied by a natural flower or by a dainty ribbon or necktie. Glaring or discordant colors rasp the nerves of children. Dresses with trailing skirts or of material that is easily harmed by dust are out of place where blackboard and crayon are used.

(c) **QUALIFICATIONS.** It is the right of every school to have a teacher who is prepared to do the work for which she is employed, who has studied conditions, is able and willing to make the best of what she finds, understands what tools are best and brings the skill to use these to the best advantage. A teacher can make no greater mistake than to try to teach "according to her salary." Are you in a school this year that pays but a meager salary and furnishes little or nothing to work with besides the walls and seats? Teach this school so well that next year a more desirable district will clamor for your services and be glad to pay well for them. Always do the best you can in salary without crowding out or underbidding another teacher. Then, whether your pay be much or little, teach as if you had a royal income and meant to earn every dollar of it.

(d) **RESPONSIBILITY.** The teacher stands legally in the parents' place during school hours; hence, she is responsible for the spiritual, mental and physical welfare of the pupils as long as they remain at the schoolhouse. The spiritual care is never to include any direct or indirect sectarian teaching. Anything and everything that savors of sectarianism is strictly forbidden by law in most places. On the other hand, the teacher is expected, by example and by

precept, to inculcate the doctrine of good citizenship—a citizenship having the Christian virtues and graces for its foundation. In the main, this work is done the most efficiently, without confusion or bluster, by the silent influence of daily example. By making and enforcing the right kind of rules, by choosing the right kind of stories to read to pupils, the right kind of songs for them to sing, the right kind of maxims for them to learn, the right kind of pictures for them to see and the right kind of games for them to play, good citizenship will certainly be taught.

The mental welfare of the children is best conserved when the teaching is such as to inspire original thought and willing effort on the part of the pupils. These characteristics are the natural outgrowth of the school when the teacher possesses the right teaching spirit, a good general education, training for her work and the skill and tact needed to preserve the harmonious relations necessary to a happy school atmosphere.

The physical welfare of the children is a matter for constant thought and attention. Speaking in general terms, the subject is covered in the discussions upon cleanliness, pure air, proper lighting, heating and seating, provisions for proper recesses and alternations of work and play.

11. Requirements. What is required of the teacher is so closely related to the direct work of teaching that we will make only a brief reference to this part of the problem at this time. The school authorities expect the teacher to exercise proper care of that part of the building and grounds under her charge. If the sole teacher in the school, the care of the entire school premises devolves upon her.

She is also required to teach so many pages of arithmetic, geography, grammar, or of whatever branches she is hired to teach, with such a degree of thoroughness as will enable the pupils to pass the required examinations and receive the expected promotions in grade at the time prescribed by the course of study. But this is not all. The higher tribunal of educational thought and opinion now requires

that, along with the arithmetic and other branches taught, pupils—even little children—must be taught to think for themselves, to know and to choose what is right, to regard the rights of others, to learn to love order and beauty and symmetry, to recognize the responsibility resting upon even the youngest child as a factor in his world, to understand that truthfulness, kindness, courage and love of home and country are indispensable to the real happiness of the individual and to the welfare of the community. In short, there must be genuine growth in character and a distinct training for the best citizenship and the highest patriotism among the school children of today in order to satisfy the best educational sentiment and to meet the actual needs of this Dominion.

TEST QUESTIONS

1. Discuss the proper seating of a school, considering the relation (a) of the seat and the desk to the pupil; (b) of seats to the source of light; (c) of seats to the stove or source of heat; (d) of seats to the teacher's desk.
2. What effects does a badly ventilated schoolroom have upon pupils and consequently upon their work?
3. What are the particular merits of each of the two systems of ventilation described in your lesson?
4. Why does character play so important a part in a teacher's success? May a teacher with character above reproach still fail in her work? Give reasons for your answers.
5. Which of the various precautionary measures mentioned in this lesson are taken exclusively for hygienic reason? Be specific and give reasons for taking the precaution.
6. What has a teacher a right to expect of the authorities employing her? What have the authorities a right to expect from the teacher?
7. What seems to you the most difficult problem with which the inexperienced country school teacher has to deal? Suggest plans to overcome this difficulty.

8. Describe the personal appearance and manners of your ideal teacher.

9. Give at length two ways in which you would secure the coöperation of your pupils in keeping the school grounds and schoolhouse in good condition.

10. In what position does the teacher stand with respect (a) to the school board; (b) the superintendent and (c) the people of the district?

CHAPTER TEN

SCHOOL MANAGEMENT

1. Importance. Successful teaching is conditional upon a well-regulated school. Before the beginning of the term the teacher should work out a plan of operation which she can use temporarily, until through acquaintance with the school she can prepare a more effective program. One might as well attempt to operate a railway without a time table as to manage a school without a definite plan from which to work. The teacher who begins school without such a plan runs great risk of failure.

2. General Matters. There are a few matters having a general bearing upon the school to which the teacher may or may not sustain direct relations, according to the system under which she works. Among these are the following:

(a) **JANITOR SERVICE.** In large school buildings, the teacher has no supervision of the janitor; that duty devolves upon the principal. If his services are not satisfactory, the teacher should report the fact to the principal. She should always treat the janitor courteously, and see that her pupils do the same. In small buildings the teacher may have entire supervision of the janitor. In this case coöperation of teacher and pupils with him will do much towards making his services satisfactory, and towards keeping the schoolhouse and grounds in good condition.

(b) **LUNCHESES.** In primary schools it is a wise precaution to permit the little ones to bring a light luncheon to be eaten at the long recess. This, in many cases, is really a necessity to the comfort and proper nutrition of young children, as the excitement incident to getting off to school in season often causes breakfast to be neglected, if not entirely omitted.

Ripe fruits in their season are the best for such luncheons; when fruit cannot be had, light, well-baked bread with

good butter is wholesome and suitable. Heavy sweets and pickles should be ruled out, but light cookies may be used.

When pupils reside a long distance from the school and the weather is very inclement, they should be encouraged to bring their dinners to school. In all other cases it is far better for children to have the warm food and the exercise incident to going home for their noon meal.

(c) **MOTHERS' MEETINGS.** In towns and small cities the meeting of the teacher with the mothers of her pupils has become a settled custom. At these meetings discussions of various matters pertaining to the welfare of the school should be encouraged. The discussions should be in the most friendly and informal manner. When so conducted, occasional meetings of this kind may be of great value. They serve to secure the sympathy and coöperation of the parents with the teacher, on the one hand, and on the other they give the teacher a better knowledge of the home life of her pupils than she will otherwise gain.

3. Emergencies. However carefully one may plan, unforeseen events are bound to occur, and the teacher should be prepared for them. The most common happenings of this kind are mentioned below:

(a) **ACCIDENTS.** To the unusual conditions, the emergencies that are liable to arise any day, some portion of these pages must be devoted. Despite the care and watchfulness of the best and most experienced teacher, accidents sometimes occur in the schoolhouse or upon the school premises. When the accident is of a serious nature, like the breaking of a bone, for instance, the teacher should send word to the parents at once and call a doctor with all speed, getting the one usually employed by the family, if possible. Meantime, the little patient should be made as comfortable as possible until the doctor arrives and takes charge.

Fortunately, such serious accidents are of rare occurrence, but a child with a headache, a toothache, a cut, a bruise or a bad scratch may appear on any day and at any

hour. Such accidents rarely need cause alarm; usually they may be effectively treated by the teacher herself. For these emergencies the teacher should have a supply of clean old linen handkerchiefs, a stick of court plaster and a spool of strong white thread (No. 8 or 10). A small, clean sponge or soft cloth is useful to cleanse the affected places before any other remedies are used.

Stings from bees or wasps are frequent in the country, and for these a little ammonia will afford quick relief. For headache, use a bandage wet in cold water and place it around the head above the eyes. A clean handkerchief wet with some stimulating, refreshing odor, like lilac extract, bay rum, cologne, or even spirits of camphor will often soothe and quiet the nerves and banish pain. Cloves will often quiet the toothache.

The location of the school building may carry with it its peculiar perils and possibilities of peril, and it is impossible to give here any special suggestions for action. If the teacher determines to retain her self-possession, to act promptly and skilfully, as far as she knows, and to send for help when a serious difficulty of any kind arises, there is nothing in the possibility of accidents to cause worry or anxiety.

(b) INCLEMENT WEATHER. When children reach the school with wet feet or wet garments, the first business should be to dry them thoroughly at a good fire. On very wet or snowy days, many children are habitually kept at home. Those who reach the school should be made as comfortable as possible. Let them gather around the register or stove while you conduct the morning exercises. Dispensing with the ordinary formalities on such occasions need not cause disorder.

Before children are sent out into cold, stormy weather, their wraps should be brought into the room, thoroughly warmed, and then put on and fastened so that there is no danger of their coming off. In summer severe thunderstorms may come up near the close of school, and then it

is the part of wisdom to send the children home early, if it is certain that they can be safely housed before the storm breaks. But if the storm has come too near before discovery, it is wiser to detain the children until after the storm, or until their parents come for them.

(c) PRECAUTIONS AGAINST FIRE. During winter, fire is an ever-present possible danger. Every large school building should have a plan for dismissing school so thoroughly worked out, and practiced, that the building can be cleared of one thousand or more pupils within two or three minutes, and this on unexpected signals. If a regular plan of dismissal and exit from the building is followed day after day, a fire alarm will cause no confusion or alarm among the pupils. In small schools there is less danger, but even here a systematic plan of leaving the building should be followed, to prevent any possibility of a panic should a fire occur.

(d) CONTAGIOUS DISEASES. There are certain contagious diseases which the teacher is liable to meet, and with the symptoms of which she ought to be familiar, if possible. Measles, mumps, whooping cough, scarlet fever and diphtheria are the principal children's diseases that are liable to appear in school, and of these the last two are the ones most to be dreaded, the ones which demand prompt and intelligent care for the patient's sake, and complete isolation for the safety of others. In any case in which the teacher is suspicious of a child's condition, the part of wisdom is to send the little one home promptly with a polite note explaining the cause, and if the parents are known to be ignorant or careless, recommending the immediate employment of a physician. Nothing should be done to cause unnecessary alarm, either to the sick child or among the well pupils. In fact, nothing should be said about the case that will attract the attention of other children, unless it becomes necessary for sanitary reasons. While promptness of action is necessary, undue haste and excitement should be avoided.

In the mothers' meetings previously referred to, a helpful subject for friendly discussion would be that of contagious diseases. The early symptoms, the progress of the disease and the period of convalescence, proper care and isolation during each stage, and the time when a safe return to school is possible, are all topics that might well come up for consideration. If a skilful physician or an experienced trained nurse could be present at one of these meetings to give a brief, plain talk upon the symptoms, care and prevention of contagious diseases, it would be a great help. If the doctor can come frequently, only one disease should be discussed at a meeting, and the mothers should be urged to participate freely in the discussion following the doctor's brief lecture. It goes without saying that their questions and remarks should be given sympathetic, respectful attention.

The schools are often the means of spreading contagious diseases in an alarming manner, and anything that can be done to teach the people the importance of prevention should not be lightly ignored. If the teacher herself is ignorant, she should not hesitate to consult a physician promptly in any case of uncertainty.

Besides those mentioned, there are other minor infectious diseases which are the outgrowth of gross neglect of the most common rules of health, and these diseases the teacher is very apt to meet and should not hesitate to eradicate even at the risk of some personal inconvenience. Sometimes whole families are affected with vermin or skin diseases which might easily be communicated to other children in the school. These are always cases that need to be treated with great skill and tact and in a private manner. The mere fact that the children are affected shows that the parents are ignorant or careless, or both, and it is quite possible that they will not care to be reminded of their neglect. Still the teacher's duty is clear; the remedy lies with the parents and not with the children. The latter should not suffer mortification for what is not their own fault. A real sympathy with the sufferings of the children will suggest to the teacher delicate

ways in which the subjects may be handled with the parents, who, however, must be made to understand the imperative necessity for a different condition. These cases of neglect are less frequent than formerly, and, in most cases, there are sanitary rules made by school officials which cover such emergencies. These rules the teacher may cite if she finds it necessary.

Caution. However disagreeable these cases may be, the teacher should manage them with skill and tact, in order to secure immediate reforms and still not arouse antagonism and ill feeling by the discharge of an unwelcome duty.

4. Apparatus. It sometimes happens that teachers enter a school building and find little or nothing to work with. Occasionally this is due to lack of school funds, sometimes to lack of appreciation of the need of proper apparatus, sometimes, alas! because the school authorities have become discouraged and rendered indifferent by the neglect of previous teachers to use the apparatus provided, or even to take proper care of it. It is the duty of the principal to see that all apparatus in the building is properly cared for, and also to encourage his teachers to make the best possible use of it. In buildings having no principal, this duty devolves upon the teacher. It is also much to the teacher's credit to be able to suggest inexpensive ways of providing simple apparatus, for even the most wealthy school districts do not have sufficient money for all their needs. Rooms of the first, second and third grades should be furnished with the following appliances; while more are desirable, these are essential:

(a) **POINTERS.** Any teacher would prefer a pointer properly made, finished with a rubber tip at one end and a hook at the other. But such is not an actual necessity, and its place can be filled, if necessary, by a hardwood twig with smooth bark and of a suitable size and length.

(b) **ERASERS.** These are often poor and insufficient in number, but, fortunately, their place may be supplied by soft old cloths which can be dusted and washed easily.

(c) **BLACKBOARD CURTAIN.** In primary rooms, a curtain that may be used to cover work that is prepared for certain classes to use at certain hours only is a great convenience. It may be made of any washable cotton goods; brass rings may be sewed to the top hem, a cord run through these, and the ends of the cord fastened to hooks in the wood-work at the upper part of the blackboard. In this way the board is not at all injured or disfigured, and the curtain may be pushed to one side when not needed. The teacher can make such a curtain at a very slight cost, and its convenience will many times repay the trouble.

(d) **CHARTS.** All primary teachers of experience know and other subjects. Many teachers have also learned the value and convenience of charts for drill work in reading, spelling, number, phonics, color, nature work that charts of their own making are in many cases of greater value than the expensive ones furnished by publishing houses and school supply companies, because they can be made exactly to fit the needs of their own particular schools.

The materials needed for a home-made chart are a good supply of heavy manila paper, a yard of strong, coarse, unbleached linen or cotton, some brass rings and a ball of heavy cord. Cut the manila paper into sheets three feet by two feet, or two and a half feet by two feet, as preferred. Take one of these for the outside cover in each case, marking on it in large, heavy, brush letters the name of the chart, as *Spelling*, *Phonics* or *Number*.

Rule the charts faintly with a lead pencil and print rows of words or figures, or whatever is desired. It is best to use a brush and India ink; but if these are not easily obtainable, use a very heavy marking pen, a rubber pen, or a soft pine stick, in cases of emergency, and very black ink—India ink is the best. The main thing is to have the printing accurate, in large, distinct letters, to prevent eye strain, and to have the chart neat as well as durable.

Stencils and rubber alphabets for marking may be

obtained, if desired, from school book publishers and from school supply houses.

The top edge of each chart leaf should be strongly bound with the heavy unbleached linen or cotton mentioned—about one inch wide on each side—to which two brass rings are strongly sewed. Through the rings pass tape or a strong cord, so that these single sheets may be hung at a convenient height for the children to use. With these inexpensive materials the ingenious teacher will provide herself with charts on all subjects in which such helps are needed. Specific directions for making these various charts are given in the lessons on teaching the respective branches. When the charts are not in use, they should be placed in the closet, out of sight, and away from dust.

(e) **OTHER APPARATUS.** Under this heading is included the material for number work, globes, maps, material and tools for construction work, and such other appliances as the work of the grade from time to time demands. These articles are described in detail in the lessons which follow, each being considered in relation to the subject to which it belongs.

5. Books and Periodicals. Every room should have a supply of books and periodicals suited to its grade of work. These should be so placed that the children, under the teacher's direction, have access to them. Of course, in a first grade room but few extra books will be needed, but these few are a great help to both teacher and pupils, and should be supplied; by their use the children begin to form the reading habit. In the second and third grades a good number of books can be read.

In cities, books are usually supplied to the rooms from the general school library; and by distributing different books to the rooms of the same grade, and then interchanging these sets among the rooms, all the pupils of that grade have access to all the books during the year. But even when this plan is followed, it is well to have a small library for the room. Some of the books should consist of stories

suitable for the children, and others should be of assistance in nature study and other branches of the course of study. In a system of graded schools, the selections of these books usually devolves upon the superintendent, principals and one or more teachers selected from the different grades.

In small towns and rural districts, the matter of procuring a library may depend almost entirely upon the teacher. When confronted with this task, she should first of all secure the coöperation of the parents; this can usually be done through the children. The district may have a fund which can be used for purchasing books, but if it has not, some other means must be devised for raising the money. A school entertainment, in which all the pupils take part, and to which a small admission fee is charged, may be admissable once a year, or once a term. These entertainments should be so managed as not to interfere with the regular work of the school. For plans and material the teacher should consult educational journals, or books published especially for the purpose. Some places have a library fund, and this may be drawn upon to supplement the local fund raised by any school.

In some cities and in some counties, libraries to be read by the children are circulated from school to school or from district to district. In this way each school in time is supplied with a large number of books. There are, however, advantages in having a library of children's books in each school. Money to purchase a library may often be raised by school entertainments.

A few magazines which the children can read and enjoy should also be provided. Third grade pupils will enjoy portions of such periodicals as *The World's Chronicle*, *The Week's Progress* and *Wide World Magazine*, while other portions can be read to them by the teacher.

Cautions. (1) Do not be discouraged if you do not obtain a library the first time you attempt it. In schools where such facilities are lacking, the communities are usually slow

to realize their necessity, and persistent effort is necessary to secure results.

(2) Work out one need before starting upon another.

(3) Be always very cautious about calling upon pupils or parents for money. To secure a working coöperation is far better, as it begets a permanent interest in school affairs, while asking often for contributions of money causes irritation and is apt to frustrate your plans.

(4) The teacher should secure the aid of her pupils in raising funds for reading matter and not attempt to carry the burden alone. The boys and girls always take far more interest in whatever costs some personal sacrifice in the way of money, time or effort.

(5) The use of the reading table must be made a privilege to be earned, and not allowed to encroach upon regular work.

(6) Pupils must be trained to handle books, magazines and newspapers carefully and to leave them in orderly arrangement for others to use.

6. Decorations. The objects of schoolroom decoration are to minister to the child's innate craving for the beautiful, to encourage his efforts by placing on exhibition specimens of his best work, to reduce truancy and absences to the minimum, to eliminate all that is base and repulsive, to make the school seem more attractive and homelike, and to create an atmosphere of refinement and good taste.

The underlying principles of such decoration must be harmony, simplicity, appropriateness, with taste and skill in arrangement. The decorations should be adapted to the season of the year and to the grade of pupils for whom they are arranged.

As a rule, when decoration is attempted at all, the tendency is to decorate overmuch and to introduce too many bright colors. In such cases the result is a crowded, bizarre appearance which gives a general sense of fussiness and unrest. Therefore, one of the first things to remember is to leave plenty of restful spaces for the eye to dwell upon

when the mind and nerves have become weary from long-continued effort.

(a) **COLOR-SCHEME.** The most restful tone color for a schoolroom is a dull green. If possible, instead of blackboards there should be boards of a dark green, which makes a less glaring contrast with the white crayon. The side walls should be of light olive and the ceiling white, faintly tinted with green. Window shades of a light olive color would complete the foundation color scheme and make a neutral tint that would pleasantly harmonize with almost any brighter color.

(b) **BORDERS.** For September, a narrow border across the top of the blackboard representing a union of golden-rod and asters may be made in colored crayon. For October, the border may be autumn leaves. November may have oak leaves and acorns, stalks and ears of corn, and so on. For these borders, inexpensive stencils may be procured, if the teacher has not the time or skill to draw. Often real leaves and other objects may be used in appropriate designs.

When there is but a limited amount of board, it must be kept for work alone. In that case, the coveted bit of seasonable color may be supplied by making a calendar in colors, from large sheets of heavy manila paper, the same as that used for charts, using a whole page for each month. At the left side place an appropriate design and carry the same idea across the top and partly down the right side in a narrow border. The letters and figures should be large and distinct, that they may be easily read in any part of the room.

(c) **PICTURES.** No schoolroom seems complete without pictures, and yet no pictures are far better than bad ones; hence, the choice of pictures should be governed by good taste, suitability of subject and adaptation to the needs of the pupils.

In primary rooms, particularly, the pictures should be of a restful character or such as from their action element give a pleasantly exhilarating effect—never those that arouse

sorrow, anger, combativeness or general unrest. The pictures hang before the children, meeting their eyes a score of times each day, teaching their silent lessons, impressing themselves indelibly upon the character.

The subjects of the pictures should be such as can be comprehended without much, if any, explanation. Moreover, the pictures should be simple in design, since many complicated details serve to confuse the children and leave behind a feeling of perplexity and doubt. Pictures of babies, little children, dogs, cats, rabbits, squirrels, lambs, hens and chickens, birds and flowers always appeal to children, as, also, those of cows, calves, deer and horses. All these lend themselves naturally to action and arouse pleasant feelings because of their kindly associations. When the picture combines any of these well-known animals with children or adults in friendly groups, the effect is better still, and a lesson of kindness to the dumb creatures of the world is also effectively impressed.

Among the many beautiful pictures admirably adapted to use in primary schools are the following:¹

Can't You Talk?—Holmes.

Baby Stuart.—Vandyke.

Family of Charles I.—Vandyke.

Friends Now, Pussy.—Kauffman.

Sir Galahad.—Watts.

The Little Nurse.—Von Bremen.

Friends or Foes?—C. Burton Barber.

Four Kittens.—T. Adam.

Playmates.—H. Merle.

The Madonna of the Chair.—Raphael.

The Madonna.—Von Bodenhausen.

The Madonna.—Murillo.

Christ Blessing Little Children.—Vogel.

Child's Head.—Vogel.

The Little Shepherdess.—Munier.

A Feather in Grandmother's Cap.—John Morgan.

Girl with Lilacs.—Millais.

Cows in Summer.—E. Van Marcke.

¹ Pictures marked with the star are better appreciated by pupils above the primary grades. They may be used in schools containing all grades of children.



From the painting by Watts

SIR GALAHAD

- Cows in June.*—Auguste Bonheur.
Playing Ball.—F. Dvřrak.
Miss Bowles.—Sir Joshua Reynolds.
Little Samuel.—Sir Joshua Reynolds.
A Noble Charger.—Rosa Bonheur.
**The Horse Fair.*—Rosa Bonheur.
**Changing Pasture.*—Rosa Bonheur.
**An Old Monarch.*—Rosa Bonheur.
**The Lake.*—Corot.
Dance of Children.—Corot.
**Landscape (white birches).*—Corot.
**Effie Deans.*—Millais.
**The Princes in the Tower.*—Millais.
**Day Dreams.*—Sir Frederick Leighton.
**Letty.*—Sir Frederick Leighton.
**Aurora.*—Guido Reni.
**Angels' Heads.*—Correggio.
**The Critics.*—Landseer
**Deer.*—Landseer.
**Old Temeraire (Nelson's flag-ship).*—Turner.

All in the foregoing list are paintings which may be had in black and white reproductions. Lists and prices may be obtained from The Perry Pictures Co., Boston, Mass.; C. P. Brown & Co., Beverly, Mass.; Soule Art Co., Boston, Mass.; The Art Education Company, Chicago, and others. It is surprising how many fine pictures may be obtained at a trifling expense.

After the pictures are chosen, care should be taken to have them hung in a favorable light and where the children of the room can enjoy them most.

Cautions. (1) The use of pictures on Biblical subjects should be guarded so that no religious sentiment will be antagonized; especially is this caution necessary in schools composed very largely of Jewish children.

(2) No picture should be chosen for the schoolroom merely because it is among those called "classic." Be sure that it possesses the needed characteristics, and, if it does, give it to the children whether it was done by "an old master" or by a more modern artist.

(3) Avoid battle scenes and such pictures as *The Par-*

thenon in Ruins, *The Death of Abel* and *The Laocoon*, for they produce saddening thoughts, unrest and even dissension.

(d) OTHER DECORATIONS. From time to time new specimens of the work done by the school should be put in evidence, changing often enough to avoid accumulations of dust and rubbish, than which nothing can be drearier in its effect.

Specimens of written work, drawing and penmanship should be preserved as an encouragement to painstaking effort on the part of the little ones. So, also, with handiwork. Sash-curtains may easily be constructed from the chains made from colored papers. Another style may be made by stringing, alternately, large kindergarten colored beads and straws cut into lengths of one or two inches. Such curtains placed across the lower sash of the windows produce a pretty oriental effect, if given artistic color blendings. Specimens of weaving, sewing, paper folding, cutting or tearing may be grouped to advantage and used in room decoration. The fact that pupils know their work may serve to decorate the room will stimulate them to greater effort.

A few growing plants, flowers in their season, are always in good taste, but these must be properly cared for and never allowed to die of neglect, else the underlying purpose will be wholly defeated.

Cautions. Remember that the first requisite in producing an attractive schoolroom is cleanliness, with an orderly, systematic arrangement of books and apparatus.

(2) The second demand is for freedom, space; overcrowding produces a sort of mental breathlessness and irritates the nerves.

(3) Harmonious results are produced by proper color-schemes, simplicity, pleasing arrangement and entire appropriateness of decorations.

(4) At least one Canadian flag should always be in the schoolroom, occupying a place of honor.

(5) Remember to change often from one exhibit to

another in these specimens of handicraft, and be careful to avoid "fussy" effects.

When the above conditions are complied with, every one will be pleasingly impressed. The schoolroom remains a workroom, but there is the same subtle sense of refinement, good taste and cheeriness that one feels when entering a well-ordered house that is the home of cultured, refined people with high ideals of life.

7. Organization. A good beginning is essential to success, and the first day is the most important day of the term. You should plan carefully for this day, and be prepared to start the pupils in their work without delay. If your class includes only a first grade, you will of necessity have to devote most of the first session to welcoming the little people and making them feel at home in their new surroundings. If you have a second or a third grade, learn before the beginning of school what lessons to assign each class, and make these assignments immediately after the opening exercises. You can then go quietly about the room and take the names of the pupils. In grades where pupils can write, this should be done by distributing slips. If these slips are of uniform size, they can be arranged on a large sheet of cardboard, so that each slip occupies on the cardboard a position corresponding to the seat of the pupil in the room. By consulting this plan of the room, you can learn the names of the pupils with little or no effort.

Determine how you are to call and dismiss classes, and what signals you are to use for directing the general movements of the school; then make use of these devices from the beginning.

Adopt the program of your predecessor until a thorough acquaintance with the school enables you to make one which will be permanent, and plan for such other work as you think will be needed. These duties can all be summed up in the following rule:

Before entering your schoolroom know definitely what you

are going to do, how you are going to do it, and when you are going to do it.

8. Helpers. Books and pencils may be very quickly and quietly distributed by *helpers* appointed for the purpose. These helpers may serve for a week, be then publicly thanked for their services and relieved by other children, who are appointed in their turn to serve for a week. They assist the teacher in various ways in the details of the school house-keeping outside of the janitor's regular duties.

General good feeling may be secured by choosing helpers on Friday afternoon each week from those who have proved themselves faithful and trustworthy. The teacher may make her appointment in such words as, "John, Helen, Sarah and Henry are among those who have been particularly faithful (or courteous) this week, and I appoint these four as helpers for next week." This right spirit may also be induced by such maxims as Lucy Larcom's "Hands that bless are blest," and Edward Everett Hale's "Lend a hand."

Caution. Children should never be forced to serve in any such capacity, nor allowed to look upon such an appointment save as a mark of distinction.

9. Program. The program is the working plan for each day of the school; it governs teacher and pupil alike. In Section 7 we suggested that a temporary program be arranged and followed until a permanent program could be made. This permanent program should be in readiness before the end of the first week. Undue neglect in this matter is liable seriously to affect the discipline of the school and to interfere with the best progress of the pupils.

(a) **POINTS TO BE CONSIDERED.** In order that a really satisfactory program may be made, the teacher must give deep thought to the answering of certain underlying questions whose relative claims must be properly adjusted. Some of these questions are recurrent and will need to be considered again and again in the application of the program, as well as in its original construction. The questions to which we refer are the following:

- (1) How many grades are there in the room?
- (2) How many subjects are there to be taught?
- (3) How much time can be allowed for each subject daily?
- (4) How much time can be given to each recitation?
- (5) What subjects are best suited to the forenoon?
- (6) What subjects are best assigned to the afternoon?
- (7) How long shall the recesses be?
- (8) When are they to occur?
- (9) When may there be other periods of relaxation and rest?
- (10) Of what length should these be?
- (11) What kind of work may be provided for pupils who are not reciting?

(b) **GRADES IN A ROOM.** In closely graded city schools, it is generally arranged to have but one grade in a room, but this one grade contains from thirty-five to seventy pupils, thirty-five being less than the average number and seventy considerably more than the average. Except in the largest cities, where it seems impossible to provide properly for the rapidly increasing number of pupils in the primary grades, superintendents try to assign not more than forty pupils to one teacher. Experienced teachers are able to handle that number with a fair degree of comfort and success. In most instances, two classes of twenty each are made, one division reciting while the other is occupied with some form of quiet work.

In schools having more than two grades in a room, the problem is somewhat more complicated. However, in such a room only one division to a grade is necessary. In planning a program for such a room, care should be taken to give each grade an equal share of the teacher's time, and to provide all pupils with work for every period of the day. The distribution of time can be arranged by giving the lower grades short recitation periods, and a correspondingly larger number of recitations. When the recitations are arranged, the study periods can be planned without difficulty.

(c) **OTHER CONSIDERATIONS.** The subjects to be taught and the number of classes necessary are determined by the course of study. Courses of study are in such general use that specific directions concerning these matters are not necessary. Most schools also keep a classification register, which contains a statement of the work of each pupil. This register the teacher leaves for her successor whenever a change occurs, and from it the incoming teacher is able to obtain such information as will enable her to classify her school.

Caution. The rule should be to follow the program, in all its details, conscientiously, day by day. The deviation is the exception to the rule, and should occur only as conditions change to make the deviation a necessity. The inexperienced teacher will find that to vary the program is the easiest possible solution for many a difficulty, but there are comparatively few cases in which it is really justified. No matter how much the teacher feels that a few minutes more would make the lesson she is conducting a perfect one, and that to stop her work on the moment is to interfere with it, yet the rights of the pupils outside this particular class demand fair consideration. This caution should not be carried too far. If it is very evident that a change in program will be to the advantage of many pupils, then the teacher should be brave enough to vary the rule. As a teacher gains in experience she will be surprised to find how by previous preparation and planning of work she can almost wholly eliminate the necessity of any great number of changes.

10. Recesses. The time for recesses, their length, and whether they are to be indoors or out, will be determined largely by local conditions. Young children should have a recess of at least ten minutes, and fifteen minutes is better still, if the time can be found. This long recess should occur in the middle of each half-day session. Whenever possible, all long recesses should be taken in the open air. Short rest periods between recitations prevent fatigue and cause the pupils to work more vigorously, hence they are in every

respect beneficial. They should not exceed one or two minutes in length. For exercises which may be used in these periods, see Volume One, pages 175-186.

Cautions. (1) Such games as jumping the rope, "snap the whip" and the like must be carefully watched, to prevent over-exertion, accidents and other injurious results.

(2) In inclement weather, the outdoor games must be dispensed with and games suited to indoors must be substituted. These should be varied, as active as may be, but not such as will damage the school property.

(3) The recess being a necessity for the preservation of health, no pupil should be deprived of it. But for flagrant and repeated violations of the playground rights and privileges, he may be compelled to take his recess *entirely by himself* until he is once more willing to conduct himself in accordance with prescribed regulations. The recess is his right, his physical necessity and the teacher's protection.

(4) If the school is under your charge, be on the playground at recess and take an active and sympathetic part in all the games. At the same time be alert to prevent accidents, impositions upon the weaker pupils and other improper conduct.

11. Work for Pupils Not Reciting. Until the child enters school he is able to find expression for his overflowing activity in a thousand spontaneous ways. It now becomes the teacher's problem to turn this same activity into educational channels and to prevent a loss of happiness to the pupils in so doing.

It is safe to say that this problem has never yet been solved with perfect success, since it involves some of the most difficult questions in the whole subject of child education. Consideration for the rights of others imposes, of necessity, some restraint upon the individual; hence, the child can no longer have the perfect freedom of his ante-school days. But his physical well-being will suffer, and the joy of existence become largely a thing of the past, under a restraint that is sternly imposed or harshly enforced.

How, then, shall we find employment for that craving activity of mind and body, employment that will be valuable and interesting, not too restrained on the one hand, nor too noisy on the other?

These become the real questions: (a) How to make the transition from home to school life so natural, easy and pleasant that the school becomes a place of happiness for the child, and at the same time teaches him gradually the willing restraint that rises from a noble self-control, born of a desire to treat others fairly and to win the love and approval of his teacher: (b) how to keep his time employed all the while in a manner to supplement the work of the recitation period, to teach the muscles to obey the will promptly and skilfully, *i.e.*, *to train the eye to see, the hand to do*; (c) how to cultivate good taste, to inculcate respect for labor and the laborer, to sharpen his perceptions and the power of discrimination, to develop a healthy moral sense, to render the child self-helpful and create in him a real desire to help others.

All this and more is to be accomplished, and quite largely through the occupations that the teacher assigns to fill the time outside of the regular recitation period. These occupations, of course, cover the busy work, and all the readings, games, marches, songs and whatever is chosen for the periods of relaxation and recreation, both indoor and outdoor.

Cautions. (1) Do not expect to accomplish everything in a day, a week, a month or a year. Be satisfied with your efforts if you see a gradual, cheerful turning towards the ideals you are trying to inspire.

(2) Remember that the child is growing, that both mental and physical powers are too weak to endure concentrated effort for more than brief periods without change. If you fail to keep this in mind, the fatigue and disrelish which paralyze further efforts will seize your pupils.

(3) Remember that genuine fun is a thing not only relished by the child, but needed to balance the periods

of real work and serious application. It affords the same relaxation to the mental powers that a game full of activity does to the muscles.

"A little nonsense now and then
Is relished by the best of men,"

and how much more by children!

(4) "Variety is the spice of life" to mature people, and to children a necessity, for the reasons already given. Children will welcome infinite repetition of favorite games or songs, but when minds or bodies feel fatigue, interest flags, and some other thing must be given—not necessarily a new thing, but a change from the last one. Lines of suitable occupations are given under separate topics in various parts of this work.

12. The Friday Program. The program for Friday forenoon remains unchanged in all respects, and usually until after recess in the afternoon the daily order is followed. There may, properly, be a deviation in the character of the recitations, using the time for reviews in the different subjects, instead of giving entirely new lessons. Oral spelling may be substituted for the usual written spelling, and the teacher may fill the time with words chosen from all that have been previously learned. A literature period in which all the pupils participate should be a regular feature of Friday afternoon. One or two children from each class may be chosen a week in advance to read to the school some interesting short article, story or otherwise, in prose or verse; others may be chosen to give suitable declamations; and the school may recite in concert the literary selections previously learned. The general science lesson should be made particularly interesting, and the time for the lesson in color work, paper folding, sewing, weaving and the like, extended.

Friday afternoon may well be the established visiting day for parents and friends, and pupils should be taught to render them the courtesies due to guests on all occasions. The favorite songs, games, marches and other items of like nature should be made prominent as a desirable part of the

exercises, and every device used to make the time an especially happy one.

If these or similar plans are carried out in spirit and in truth, then no half day of all the week will be a more potent factor in the education of the children, and through its pleasant features the much-needed bond between home and school will be greatly strengthened. Moreover, the pupils will go home at the end of the week refreshed and made happy by this little gala time, which is, really, the legitimate outgrowth of a week of required work faithfully done, but which comes to them more in the light of a well-earned reward wearing the guise of a partial holiday.

Cautions. (1) Never allow the Friday afternoon exercises to extend beyond the usual closing time; it is better to make a practice of closing a few minutes earlier. However, in some districts public sentiment will not permit earlier closing, there being a general sentiment that the teacher should earn her salary by working full hours. However false such an idea may be, it deserves respect until the teacher has had time to change public feeling.

(2) The children should be made to feel that the entertaining Friday afternoon program calls for as much honest effort and is as dignified a part of the week's schooling as any other. If the exercises are undertaken in the right spirit and are carried out as perfectly as the children's ability will permit, they are helpful; but if there is a general letting-up, a feeling that the time does not count for much and that the exercises might just as well be omitted, then it is far better to discontinue them.

13. Special Days. These are days set apart for marking some event or interest of particular importance, as Bird Day, Arbor Day, Empire Day, Thanksgiving, Christmas, and birthdays of great authors, artists, inventors and philanthropists. Such days have become established facts in so many schools that a detailed account of how to celebrate them is not needed here.

In a number of states booklets and other appropriate literature are sent out yearly by the Superintendent of Public Instruction suggesting helpful programs, poems, stories, songs and decorations to be used on Arbor Day and on Bird Day. In addition to these aids, similar help for the other special days will be found in books published for that particular purpose by C. W. Bardeen & Co., Syracuse, N. Y.; Milton Bradley & Co., Springfield, Mass.; A. Flanagan Company, Chicago; Educational Publishing Company, Chicago, and many others who deal in school supplies and school literature. Such books contain about all the help any teacher needs and are not only comprehensive, but inexpensive, as well. Study first what your own province issues. In using books from the United States substitute Canadian selections.

14. The Recitation. (a) **PURPOSE.** There are still many teachers who appear to think that the sole purpose of the recitation is to test the pupil's preparation of the subject or portion of a subject that has been assigned to him for study.

This is a mistaken notion, however. While a portion of the recitation period should be devoted to testing the thoroughness of preparation, other and higher ends are to be accomplished. The teacher must discover whether the pupil understands the relation that the present lesson has to those that have preceded it; she must also discover how much of the new lesson has become a part of the pupil's permanent stock of knowledge, *i.e.*, how much of the information contained in the new lesson he has grasped and assimilated; and, finally, her questions during the recitation must be such as to bring out the thinking powers of the pupil and show him the relation the lesson bears to himself.

(b) **THE PLAN.** Speaking in general terms, we may say that the recitation itself consists of the introduction, the development, the drill and the summary.

The *introduction* should always be brief, pertinent, and a preparation for the new lesson; in other words, the introduction forms the connecting link between the previous

lesson and the new one. When a portion of the subject has already been taught, the introduction should be a rapid review of that part of the subject upon which the new lesson depends. Frequently two or three questions clearly put will be all that are needed in such cases. When a new topic—one that the pupil is considering for the first time—is the lesson assigned, then a single pertinent remark from the teacher may serve as the introduction.

The *development*, in most cases, should occupy the major part of the recitation. In this division the information contained in the new lesson is brought out carefully and clearly, point by point, in properly related order. The preparation of the lesson is thoroughly tested, the weak places revealed, the assimilation, or lack of it, discovered. This is properly the teaching portion of the lesson, hence the term *development*.

In nine cases out of ten the development is the most enjoyable part of the recitation, both to teacher and pupil, because it deals with new ideas and also because it permits the free interchange of thought as the questioning brings the reasoning powers more and more actively into use. Moreover, it is this part of the recitation that introduces apparatus and illustrations, to make doubtful points clear by actual demonstration or by the more subtle elucidation afforded by an apt simile or metaphor. In either case, the teacher is using her skill to establish the desired truths by means of the law of associated ideas.

The *drill*, as its name implies, is a section of the recitation meant to fasten in the memory of the pupil the new ideas of the lesson, one presentation of which is rarely enough for the purpose. Retention may be said to be the child of attention and repetition, and on these two powerful aids the teacher must depend for success in the drill.

No one must conclude that the drill necessarily is a certain number of minutes following the close of the entire development. The better plan is by repetition to fasten each point thoroughly as it is brought out, remembering

not to use so much time for this as to distract the reasoning power from its onward course. When the development is completed, it is most desirable to use a minute or two in recalling the points of the lesson in order, dwelling a little on each, to remove any possible vagueness of comprehension.

Inexperienced teachers are apt to neglect the drill, spending all their enthusiasm, energy and time upon preparing and presenting a clever and interesting development. This neglect leaves a weak place in the lesson and shows a lamentable lack of pedagogical judgment on the part of the teacher. The first impression of a new truth must be deepened and made permanent by repetition, but the repetition must be made interesting.

A drill that consists of the same question asked over and over, requiring again and again the answer in the same form, is a mere waste of time, repugnant both to teacher and pupils, because there is neither interest nor life in it. Be prepared to word your questions in different ways; call forth the answers in new forms; use both individual and concert work; keep the class wide-awake, alert and full of interest by distributing your questions in unexpected ways. To illustrate, suppose you have merely worked out with objects the fact that 2 times 2 are 4. Do not keep asking endlessly, "2 times 2 are how many?" Change to "How many are 2 times 2?", "How many 2's in 4?", "How many are 2 multiplied by 2?", "4 is how many 2's?", "Two 2's are how many?", "How many 2's can you get from 4?", "4 contains how many 2's?", "Into how many 2's can you separate 4?" and "How many apples are 2 times 2 apples?" Vary the last question indefinitely for numerous familiar objects. If a pupil fails, send him to the objects to find the answer and then let him answer the question he failed on. Never omit this, as effort and responsibility are needed to make accurate students; and even in the primary grades our desire to make the work pleasant for the pupil must not lead us to do for him what properly belongs to himself to do.

The drill should often be extended to cover previous lessons. In fact, there are certain things that must be learned absolutely, and these cannot be firmly fixed in the mind in one or two recitations. Besides, the effect on the memory is greater when time elapses between drills.

The *summary* is the closing of the lesson, the summing up of all the important points, having the class repeat singly and in concert the facts that must be remembered. The points should still be recalled in order, to aid the memory, but all illustrations and non-essentials may be omitted. It is really the drill expressed in general terms and should always be rapid, earnest, logical and final.

(c) THE TEACHER'S PREPARATION. It is assumed that every teacher prepares herself for the recitations she is to conduct, no matter what the grade of the children. This does not mean of necessity that each particular recitation must have its special preparation, though often for days at a time this may be necessary. But it does mean that no teacher can hope to succeed who has not so thoroughly prepared herself as to be the ready and resourceful master of that particular unit of a subject which she expects to teach. Sometimes the preparation may be made for a week in advance. Sometimes, when classes are numerous, the special preparation for one lesson answers for many. But again, it may be necessary that many moments of time be taken in so close a preparation that the very questions are carefully formulated, and the individuals who are to answer them are selected in advance.

In preparing for recitations the teacher considers carefully the following points:

(1) The subject-matter of the lesson. This the teacher must thoroughly understand, not only in itself but in its relations to other things.

(2) The adaptation of the subject-matter. It is evident that primary children cannot have the same grasp of facts that older people possess; it is the teacher's duty to select those phases of a subject which appeal most strongly to

the children's minds and to adapt them carefully to the comprehension of the latter.

(3) The method of presentation. The teacher must determine how the chosen subject-matter can be most effectively presented; that is, through what senses and in what way the child's mind shall be most quickly attracted and most firmly held in attention.

(4) The illustrations to be used. Vivid illustrations, suitable to the comprehension of the child and entertaining to him, serve to fix in his memory the things which have been presented and enable him to understand what has been presented.

(5) The materials to be used. Having determined the method of presentation and the illustrations to be used, the teacher must collect and have available for ready use the materials which are to assist in presenting or illustrating the subject-matter. For instance, if the lesson is in arithmetic, this may mean the blocks, the sticks and whatever other objects are used to give the idea of number.

(6) The relation of this lesson to the whole subject. Before the teacher is ready to give proper instruction she must realize thoroughly the relation of the particular recitation to those which have preceded and its possible bearing upon those which are to follow. No fact will remain long in the mind or be susceptible of explanation unless its relations to other facts are understood. Unless the teacher clearly sees the relation between every lesson and its neighbors, she cannot hope to make that relation clear to others.

15. Questioning. A great part of a teacher's success depends upon her power to ask and to distribute questions correctly, rapidly and skilfully; hence, it is deemed wise to discuss this subject at considerable length.

(a) **CHARACTERISTICS.** Questions should be clear, definite and concise. They should be framed in plain language, to suit the age of the pupils, and asked in logical order.

Abridged questions may be asked of older pupils, but

not so frequently of young children, lest they fail to understand the meaning.

Questions should not be indefinite, as the children waste time trying to guess which one of several possible answers you desire. They should not contain the answer nor a part of the answer. That mode makes lazy pupils, for they learn to depend upon such help.

Questions that may be answered by "Yes" or "No" should usually be followed at once by the question, "Why?", or the direction, "Give your reasons for that answer." Such a plan prevents mere guesswork on the part of the pupil.

Questions should be asked in a pleasant, conversational tone, and neither earnestness nor excitement should raise the pitch or increase the volume of voice used.

Relevant questions from members of the class should be encouraged. The highest art of teaching does not consist in asking questions, but in kindling pupils so that they ask the questions.

Sometimes allow pupils to take the teacher's place and question the class. This is an excellent language drill, is much enjoyed and pleasantly breaks the monotony.

Cautions. (1) To repeat questions breeds inattention and wastes the time of the class.

(2) Do not repeat the answers of pupils; this begets inattention, favors lazy pupils, wastes time and nearly always shows a lack of preparation on the part of the teacher.

(3) Do not put questions in a set form. Often a pupil will be able to answer the question correctly if the phraseology is changed, even when he fails to understand as first asked.

(b) DISTRIBUTION. Begin sometimes at the head of the class and question in order to the end. Again, begin at the foot of the class and reverse the order. At another time begin near the middle of the class and "skip around," being sure not to omit any pupil. It is better not to follow the same order twice in succession. Question the pupils most that most need it. Sometimes ask all or nearly all

the questions of one or two pupils, particularly if they are habitually inattentive, lacking in preparation, or impertinent. As a rule, question the brightest and best prepared pupils only enough to keep their interest active. The slow-thinking pupil needs more time and is the real test of the teacher's success as an instructor. When pupils are abnormally timid or self-conscious, ask the easiest questions of them until they gain courage by their success in answering correctly. Then treat them like the rest of the class.

Cautions. (1) Avoid having any one pupil monopolize the time. You belong to the whole class.

(2) Avoid being led into a discussion that breaks up your logical order of questioning—a trick resorted to sometimes by older pupils who are not prepared upon the lesson and who wish to fill the time with irrelevant talk.

(3) Do not permit any pupil to think he has finished his part of the recitation when he has answered one question. If you detect signs of inattention or laziness, go back again and again to the inattentive pupils, asking them one or two questions unexpectedly.

(4) Ask the question first and *then* name the pupil who is to answer.

(c) **ANSWERS.** Pupils should be required to rise promptly, stand easily upon both feet and answer the question in a clear tone, using correct language. Do not permit such slovenly habits as beginning to answer while rising, beginning to sit down before the answer is completed, leaning on the desk or standing upon one foot, as all these uncouth physical habits react upon the mental powers and beget slovenliness there. As to the form of answers, let common sense prevail; sometimes require complete sentences for answers and sometimes but a single word, according to the needs of the question and the attendant circumstances.

Caution. Many school children acquire a sort of vernacular made up of street slang which is often so pithy and comprehensive that indulgent parents permit its use without rebuke. This makes the teaching of correct English

doubly difficult for the teacher, whose duty it is rigidly to enforce the rule prohibiting slang in the schoolroom against both her pupils and herself.

16. Reviews and Examinations. (a) **REVIEWS.** In primary grades most of the review work should be oral. In fact, it needs to form a part of nearly every lesson and may be given either as the introduction of the new lesson or made to fill the last moments of the day's lesson preparatory to some new phase to be presented on the morrow. It is usually better to make no reference to the review when it is given daily, but now and then it acts like a tonic to say to the children, "Tomorrow I shall ask you all the questions I can think of about Lesson Three. Do you think you can all be ready to answer?"

Sometimes, however, it is best to say, "Tomorrow I shall let you write your answers, just as the older classes do. The questions will be on Lesson Five." When the recitation period arrives, the teacher should be prepared with a set of easy questions, each of which may as a rule be answered by a single word. Pupils should be required to give strict attention, not expecting questions to be repeated. Indeed, the teacher should prevent requests for repetition by speaking slowly and distinctly and by giving time enough for the answers to be completed. Easier questions should be given for such a review than in an oral exercise, as the mechanical difficulty of writing and spelling the answers retards the thinking and reasoning powers in their action.

Cautions. (1) Such written exercises are pleasantly stimulative in their effect upon the little ones, if not hurried too much or filled with anxiety by the manner of the teacher.

(2) Written reviews should not be of daily occurrence in the first three grades, because of the expenditure of energy they involve. However, this does not preclude brief daily written exercises in spelling or language.

(b) **EXAMINATIONS.** Formal examinations should never be given in the first three grades, and in all well organized systems they are becoming less frequent in the intermediate

and grammar grades, the daily tests and frequent reviews being relied upon to take their place.

Some cities have entirely abandoned all formal examinations, relying upon the daily work alone as a criterion for promotions. Neither extreme seems best to use with pupils above the primary grade, since some pupils acquit themselves well orally and yet are almost wholly unable to do themselves credit when writing, while others are so embarrassed by having the attention of the class focused upon them that they make a very poor oral recitation and do themselves great credit in writing. Therefore, in order to get nearest to a correct judgment of the actual work of the class, it seems wise to have some written tests.

17. The Amount of Written Work. The time is not far in the past when all teachers required too much written work from all grades of school children. Even the youngest classes seemed to spend all or nearly all their time outside of recitation with a pencil in hand. No other form of seat work was known, and gross injustice was thus done by keeping exactly the same sets of muscles and nerves under tension for great lengths of time. The reaction came, and now in the cities and in most of the progressive schools everywhere children are provided with a great diversity of seat work, and the amount of written work is thus greatly reduced. It is safe to say that, even now, care should be taken not to require too much written work from young pupils, either in school or at home. In fact, no more should be demanded than the teacher finds time to examine and correct with care. In all written work careful attention should be given to position and movement. Pupils should not be allowed to violate in their written exercises all the principles taught in the writing class. (See page 177, Section 31.)

18. Marking Papers. There are among teachers two extremes in regard to the examination of papers. One extreme is the over-conscientious but not over-wise teacher who becomes a veritable slave to examination papers, using

up each day long hours that she needs for exercise and for sleep. At the other extreme is the teacher who has little actual sympathy or conscience. She requires the work of the pupils, collects the papers and—consigns them to the waste-basket without even a glance.

Neither of these teachers is wise, neither is doing herself or her pupils full justice. The real problem is to avoid extremes and to avoid needless waste of nervous energy. When the teacher reads entirely through every paper every day and, faithfully correcting every error found, even to the last comma, then hands the papers back to the pupils, the result is often disheartening in the extreme, for frequently the pupil crams the paper into his pocket or tears it up without a look at the errors, the correction of which has cost his teacher such strain upon eyes and nerves.

It seems wiser, therefore, to have the ordinary written exercises corrected and marked in class as far as may be. There are several successful ways of accomplishing this:

(1) The teacher trusts to the honor of each pupil, gives out the correct answer to each question and permits each pupil to mark his own paper.

(2) Beginning with the pupil farthest back in each row, papers are passed forward, each pupil marking a classmate's paper as the teacher reads the proper answer. Papers may also be passed backward, across the aisle and exchanged in a number of ways, the pupils marking their neighbors' papers. The name of the one who corrects the paper should be signed below the name of the original writer, in order to forestall any possible temptation to favor a friend or deal unfairly with any one. Frequently and unexpectedly the papers should be called in and reviewed by the teacher.

After the papers have been corrected they should be returned to the writers and the criticisms noted. With a little practice this work can be done quickly and skilfully, and in consequence is an excellent training.

3. Still another method is to have certain pupils help the teacher regularly in correcting papers—in spelling and

arithmetic, chiefly, because these require less judgment to mark correctly. The best pupils to select for aids are those who are entirely trustworthy and who prepare their own work quickly, leaving time upon their hands that must be turned to account usefully.

It is necessary to prevent children and parents from thinking too much of the criticism is done by the pupils; hence, very frequently the teacher must call in the papers and mark them unaided. She need not, however, take those of the entire school in any one day, but make a judicious division as to subjects and classes. In this way she can easily learn the exact character of the work of each child in all his subjects and still not be overburdened.

19. Choosing Methods. In methods, as in machinery, there is a best way which operates with the least friction, without loss of time and without waste of energy. There is no one method to cover all subjects nor all parts of the same subject. The best a teacher can do is to make herself familiar with all methods in good standing among leading educators, choosing for her own use the ones best suited to the needs of her particular school and its individual pupils. Owing to the diversity of circumstances and the unequal powers and attainments of children of the same age, better results are generally secured by a wise combination of the best elements of several good methods rather than by adhering rigidly to any one method.

The surest test of your method of teaching any subject is the question, "Am I giving the pupils the fullest possible opportunity for being self-active?" Self-activity means a great deal more than activity in response to the teacher's suggestions.

Caution. New methods are constantly being presented, some excellent, some fairly good and some positively bad. Examine each with care and without prejudice. Adopt nothing new simply because it is new. See first that it has the right elements to insure success. On the other hand, do not refuse to give up a method simply because it has

been used a long time. When convinced that a new method is really better, adopt the new and relegate the old to second place, or drop it altogether, if found really faulty.

Reading the best educational journals and educational articles in current magazines and newspapers, attending teachers' meetings and visiting good schools will keep teachers acquainted with the trend of educational thought and the changes projected or accomplished in methods of teaching. There is no legitimate excuse for not knowing these things as long as one fills the teacher's position.

20. Order of Procedure. The senses are the avenues through which the child gains most of his knowledge. These, with certain mental activities, constitute the perceptive powers. One of the most important duties of the primary teacher is to secure the regular and systematic development of these powers, and to do so she must carefully attend to the sense-training of the child. Through this training his perceptive powers should be so developed that they will serve him quickly, accurately and faithfully.

Each sense within its own peculiar sphere presents knowledge that cannot be obtained through any other. Therefore, all the senses should be trained. Because the eye is so much more quickly and easily trained than the other organs of sense there is frequently a tendency to rely too much upon sight, to the neglect of the other senses. The child who receives only eye-training has his powers of observation very imperfectly developed. In order to obtain a complete knowledge of any object, all of the senses possible should be brought to bear upon it.

The ideas acquired through observation are formed as the result of comparison with ideas already in the mind; therefore, they develop slowly. It is only as the ideas form that they can be expressed hence, in order to secure accurate expression, the child at first should be given ample time for comparison. Repetition of the lessons is also necessary, because the child does not obtain a complete idea from a single observation.

The ideas and processes must be made clear and simple. Therefore, the teacher should take great care in preparing observation lessons. At first only very simple objects should be used, and these should be few in number. Many teachers fail to secure the desired results from neglecting this precaution.

In all primary lessons the order should be observation, examination (with comparison), and last of all, expression, or seeing (perceiving), doing, telling. The success of any lesson should be measured by the degree of interest aroused and by the depth of the impression made. As it is the quality and proper assimilation of food that nourishes the body and promotes its healthy growth, rather than the quantity eaten, so of all the information brought to the mind that alone is of permanent value which is apperceived, apperception being to the mind what the assimilation of food is to the body.

Cautions. (1) In the effort of the present day to avoid training the memory exclusively, there is danger of not training it enough.

(2) The two laws that dominate memory growth in childhood are the law of association and the law of repetition. Power comes from exercise, and impressions are retained by repetition as well as by the association of ideas.

21. Habits of Mental Work. Steps in the development of a subject should be arranged in the order of logical dependence, each new step being the outgrowth of previous ones. This is to cultivate an orderly habit of mental work and to develop a logical mode of thinking and reasoning.

See that the habit is formed of filling every hour with something valuable. Develop the child's power of close attention as rapidly as can be done without forcing it to the point of mental fatigue. He can concentrate his powers for but a short time only, and then he must have a complete change; therefore, make the lessons brief. Aid attention by making the lessons full of vivid interest, and change often to something entirely different. It is perilous to keep

the same sets of brain cells working for a prolonged period, for they are weak in childhood, and easily exhausted.

Children surround themselves by a world of "make believe," the creation of their own imaginations, in which they dwell happily and contentedly. From this fact wise teachers draw a lesson and call the imagination into active use in the daily routine of the schoolroom, through it converting the dullest work into a happy game. When something especially difficult is to be memorized, the frequent "make believes," so delightful to children, will in no way conflict with the development of the habit of attention so necessary to success. On the contrary, this habit is more easily established by being converted from a difficult, distasteful task into a genuine pleasure. For example, the teacher may have in mind the strengthening of special muscles of the body by means of particular exercises that call these muscles into use. To enter into a discussion of the physical laws involved and the necessity for such and such movements would be an utter waste of time. The children neither comprehend nor care for the technique of physical culture. But the rhythm and activity and novelty they enjoy and enter into with quick appreciation. Hence, the teacher wisely omits the lecture, with its dull explanations, and simply calls upon all the children to skip around the room as lambs do; to let their hands be butterflies flitting and fluttering in the air; to play they are housekeepers and have the rugs to pick up, shake vigorously and replace upon the floor; or they may make (imaginary) snowballs and throw them hard at one another. If this last exercise calls forth a "make believe" terror that induces much dodging of the balls (?) and ends in a good laugh, all the better. Happiness is the best atmosphere for work—and the muscles have had the exercise the teacher considered necessary. (See Volume One, pages 177-186, Sections 17-23.)

Cautions. (1) Teachers should allow the formation of no habit of thought or work that must afterward be corrected. Prevention is vastly easier than cure.

(2) "Make haste slowly," being careful not to heap up difficulties. "One step at a time" is all the child can take, and each step should give him added strength and self-reliance.

(3) Do not allow pupils of any grade to waste time or to work lazily.

TEST QUESTIONS

1. What contagious diseases should the teacher guard against? What are the best means of prevention at the teacher's disposal?

2. Why are charts made by the teacher usually more valuable than those purchased? What material is needed for making these charts?

3. Of what advantage are suitable decorations for the schoolroom? Give a plan for decorating a room with autumn leaves and grains.

4. What is the purpose of reviews? How should they be conducted in the first grade? In the third grade?

5. State the characteristics of a good question? Give questions on teaching the table of 5's in multiplication to a second grade class.

6. What is the chief purpose of a temporary program? In what respects will the permanent program differ?

7. At what periods in the day should the most difficult work be given? Give reasons for your answer.

8. What are the chief divisions of a recitation? Which of the mental powers is most directly appealed to in each division?

9. What is the tendency in regard to formal examinations? Is the tendency a good one? Give reasons for your answer.

10. By what should the teacher be guided in choosing methods of presenting her subjects? What is the difference between methods and devices?

INDEX

Roman Numerals I and II refer to Volumes.

- Abbreviations**, teaching use of, I, 152-153.
Absence, I, 11.
Accidents, II, 308-309.
Action Sentences, in reading, I, 34.
Addition, in first year, I, 253, 258-263, 267-269; in second year, illustrative lessons, 277-281.
Adventure. See TRAVEL.
Aids, books for teachers, I, 23, 122, 160, 195-198, 224, 242, 270, 326, 410; II, 35, 153, 182, 231, 246, 283.
Alphabet, The, how taught: in first year, I, 39-40; in second year, 98-99.
Alphabet Method, in teaching reading, I, 25-26.
Amphibians, I, 388.
Angelus, The, study of, II, 8-9.
Animal Life, I, 369-409; birds, 371; food of birds, 372; suggestions on bird study, 377; nesting boxes, 379; the crow, 382; the robin, 384; birds that tell their names, 384; study of the hen, 385; fishes, 386; amphibians, 388, reptiles, 391; the horse, 393; the cow, 398; sheep, 400; the dog, 401; the cat, 402; rats and mice, 403; squirrels, 404; rabbits, 406; insects, 406; reference books, 410; questions, 411; lessons on the fly, 426-441; lessons on the mosquito, 441-447.
Answers, requisite qualities of, II, 335-336.
Apparatus, for nature study, I, 326-328; for school, provision and care of, II, 312; pointers, 312; erasers, 312; blackboard curtain, 313; charts, 313-314; other items, 314.
Aquarium, An, I, 333.
Arithmetic. See NUMBER WORK.
Articulation, drills in, I, 119-122.
Association, law of, II, 163-164.
Baby Dear, words and music, I, 231.
Bachelor, Irving, extract from DARREL OF THE BLESSED ISLES, I, 13.
Bailey, Liberty Hyde, quotations from, I, 323, 337, 340, 342, 346, 362, 384.
Ball Games, I, 220.
Baskets, in Nature Study, I, 335.
Bean Bag Games, I, 217.
Bed, construction work, II, 64.
Bindweed, I, 365.
Biographies, I, 137, 169.
Birds, I, 371-386; food of birds, 372; suggestions on bird study, 377; nesting boxes, 379; the crow, 382; the robin, 384; birds that tell their names, 384; study of the hen, 385; subject for drawing lessons, II, 136.
Blackboard, The, extent of, II, 293-294; quality, position, care of, 294; curtain for, 313.
Blackboard Lessons, in reading, subjects for, I, 46-47; how long continued, 47-49; in penmanship, II, 173-174.
Blood, The, lessons on, II, 205.
Boat, construction work, II, 77.
Body, parts of the, II, 197.
Bones, The, study of, II, 204-205.
Books, introduction of, in reading class, I, 49; for reference in nature study, 283; first exercises in constructing, II, 47-48; for seeds, 55-56; for quotations, 64; of flowers, 65; of trees, 69; of leaves, 69-70; of birds, 75; covers for, 98; for school library, 314-316.
Books for Teachers, DISCIPLINE, I, 23; READING, 122-123; LANGUAGE, 160-161; STORY-TELLING, 195-198; PLAYS AND GAMES, 224; SONGS, 242; NUMBER WORK, 270; NATURE STUDY, 410-411; GEOGRAPHY, II, 35-36; DRAWING, 153; SPELLING AND PENMANSHIP, 182; MUSIC, 231-232; USE OF THE SENSES, 246; MORAL TRAINING, 283-284.
Borders, for decoration, II, 317.
Boxes, construction work: triangular, II, 50-51; four-cornered, 77; square, 115.
Breathing, exercises in, I, 96-97; II, 189-190.
Brook Basin, type study of, II, 11-13.
Brown, Elmer E., quoted, II, 257.
Busy Work, II, 325-327.
Butterflies, I, 407.
Cage, Cricket, I, 335.
Calendar. See WEATHER CALENDAR.
Canada Thistle, I, 364.

- Capitals**, rules for, in first year, I, 32; in second year, 78.
- Carrot**, Wild, I, 365.
- Cat**, The, I, 402.
- Caterpillar**, I, 406.
- Cawston Farm**, II, 18.
- Chains**, paper, construction work, II, 50.
- Chair**, construction work, II, 50.
- Changing Seats**, a game, I, 223.
- Charley over the Water**, I, 204.
- Charts**, use of, in first year reading, I, 41-42; in number work, 260-262; for plant study, II, 22, 24; construction of, 313-314.
- Cheesecloth**, I, 336.
- Child's Realm**, The, I, 323.
- Christmas Studies**, construction work, II, 45, 49-50, 54, 66; art work, 114-118.
- Chrysalis**, or PUPA, I, 408.
- Citizen and Tribune Plan of Pupil Government**, II, 280-283.
- Climate**, third grade, study of, II, 25-26
See WEATHER.
- Climbers**, The, words and music, I, 233.
- Clouds**, I, 343.
- Coasting**, words and music, I, 227.
- Color-Scheme**, in schoolroom, II, 317.
- Combination Method**, in teaching reading.
See ECLECTIC METHOD.
- Compositions**, plays orally composed, I, 139; in third year, 151; original, 157-158; sense factor in, II, 239.
- Conduct**, proper and improper, II, 277-279.
- Construction Work**, educational value, II, 37; adaptability of course, 37; materials, 37; relative value of results, 38; teacher's preparation, 38-39. First year: paper cutting, 39-40; preliminary exercises, 40-43; fruits, vegetables and animal forms, 43-44; Thanksgiving dinner table, 44-45; furniture and utensils, the house, 45-46; spring work, 46; exercises in stitching, 46-47; autumn work, 47-49; Christmas tree ornaments, 49-50; triangular box, 50-51; match scratcher, 51; valentines, 51-52; Easter eggs, May baskets, cover for drawings, 52. Second year: nature of work, 53; fruits and vegetables, trees, Puritan poster, 53; village, 53-54; Santa Claus, Christmas tree poster, 54; winter sports, 54-55; poses and games, 55; books for seeds, 55-56; pumpkin masks, 56; braiding and cording raffia, 56-58; colonial cradle, raffia napkin ring, 58; woven holder, 59; sewing bag, 59-60; screen, 60-61; soldier's cap, 61-63; table, 63; chair, 63-64; bed, Easter rabbit, books for quotations, 64; books of flowers, 65. Third year: nature of work, 65; animals and figures, 65; wagons and parade, Santa Claus, gardening, 66; farm, 66-69; envelope, book of trees, 69; book of leaves, 69-70; Thanksgiving dinner cards, 70; post card album, 70-71; sled, 71; picture frame, 71-72; flower pot cover, 72; woven purse, 72-73; valentines, 73-74; Easter greetings, 74; kite, 74-75; May basket, book of birds, 75; additional foldings, 75-77; doll's house, 77-79.
- Contagious Diseases**, II, 310-312.
- Cornucopias**, construction work, II, 50.
- Counting**, children's interest in, I, 245-246; first lessons in, 249; devices for, 252-254; lesson in counting by tens, 267-270; in second year, 272; in third year, 319.
- Cover**, for books, I, 98; for drawings, II, 52.
- Cow**, The, study of, I, 398; poem, 400.
- Cradle**, Colonial, construction work, II, 58.
- Crayons**, II, 82, 171.
- Creamery**, visit to a, II, 29.
- Criticism**, in reading class, rules for, I, 74; by pupils, 74-76, 103-104.
- Crow**, The, I, 382.
- Cupid's Coming**, Variation of, I, 215.
- Curtains**, for blackboards, II, 313; of colored paper chains, 320; of beads and straw, 320.
- Cushion Dance**, I, 217.
- Cutting**, exercises in: first year, I, 31-52; second year, 53-65; third year, 65-79; freehand, 104, 130.
- Daisy**, I, 363.
- Dandelion**, I, 365.
- Dawn**, I, 337.
- Decimals**, I, 317-319.
- Decorations**, for school grounds, II, 294-295. For schoolroom: purpose and principles, 316; color-scheme, 317; borders, 317; pictures, 317-320; specimens, curtains, plants, flowers, 320; general requisites, 320-321.
- Denominate Numbers**, reduction of, I, 306; illustrative lesson, 307-309.

Development, of subject for recitation, II, 330.

Diacritic Marks, I, 86-89.

Discipline, defined, I, 1-3; ideals, 3-5; ends of, 5; habits, 5-7; order and disorder, 7-8; whispering, 8-10; thieving, 10-11; tardiness and absence, 11; restlessness, 12-13; obedience, 13; rules or laws, 13-16; need of more sympathy, 16; maxims and proverbs, 16-17; happiness as a factor, 17-18; causes of disorder, 18-20; silent influences, 20-21; punishment for primary grades, 21-22; rewards and prizes, 22; summary, 22-23; books for aid in discipline, 23.

Disorder. See ORDER AND DISORDER.

Division, illustrative lessons, second year, I, 290-296; short division, 293-296.

Dog, The, I, 401.

Doll's House, construction work, II, 77-79.

Drainage, study of, II, 27.

Dramatization, *The Lion and the Mouse*, I, 80-81; in third year reading class, 104; oral composition of plays, 139; dramatization explained, 183; as a mode of clarifying ideas, 184; over-emphasis on oral expression, 184. In the first grade, 185-189; limitations, 185; example of pantomime, 185; use of dramatization in nature study, 187; In the Spring, 188. Second grade, 190-193; best basis for this grade, 190; kind of stories to select, 190; a good story dramatized, *the Elves and the Shoemaker*, 190. Third grade, 193-195; greater care in selection, 193; increase in stage-setting, 194; dialogues may be provided, 194. Bibliography, 195.

Drawing, correlated with language, I, 139; aim of lessons, II, 80; arrangement of plan, 80-81; materials, 81-82; supplies and supply houses, 83. September: first week, decorating school-room, lessons in color, use of water colors, 84-86; second week, free illustration, figure drawing, 86-90; third week, study of grasses, memory drawings, 90; fourth week, flower painting, memory lessons, exhibits, 90-93. October: nature walks, 94; first week, autumn weeds, seat work, 94-96; second week, autumn leaves, book cover, 96-98; third week, trees,

landscapes, illustrating poem, 98-99; fourth week, fruits, modeling, 99-101.

November: preparatory work, 102; first week, fruits and vegetables, cutting and modeling, 102-104; second week, outdoor studies, illustrating reading lessons 104-105; third week, special events; fourth week, preparation for Thanksgiving, 106-109.

December: nature and picture study, 110; first week, winter sports, 110-112; second week, winter landscape, 112-114; third week, preparations for Christmas, 114-116. January: first

week, toys, 116-118; second week, object drawing, the pencil, 118; third week, object drawing, 118-120; fourth week, object drawing, 120-122. February: preparation for special days, 122-124; first week, receding lines, 124-126; second week, perspective; Lincoln's birthplace, valentines, 126-127; third week, national flag, soldier's hat and figure, 127-128; fourth week, illustrated stories, 128. March: month of awakening, 129; first week, illustrated poems, paper cutting, 129-130; second week, birds and branches, 130-132; third week, studies in figures, 132; fourth week, outdoor studies, picture study, 132-134. April: springtime, 134-136; first week, study in birds, bird booklet, 136; second week, garden scenes, 136-138; third week, spring landscape, 138; fourth week, spring flowers, May baskets, 138-140. May: animal life, 140-142; first week, study of animals, designs, 142-144; stained glass effects, 144; third and fourth weeks, articles for the home, 144-146. June: annual exhibition, 148; first week, invitations, 148-150; second week, outdoor studies, animal studies, flags, 150; third week, art portfolio, 150-151. Picture study: value, 151-152; method, 152; selection of pictures, 152-153; aids, 153; correlated with spelling, 164; sense factor in, 244-245.

Dream Peddler, The, words and music, I, 228.

Drill, in punctuation, I, 77; for articulation, 119-122; general character of, II, 330-332.

Duck on a Rock, I, 216.

- Ear-Minded Children**, I, 45.
- Ears**, The, parts, II, 197-198; care of, 198-199; tests of, 235-236
- Ear Training**, SHARP EARS Game, I, 83; the WONDER BOOK, 83-84; associating sound and symbol, 84-86; suggestive lessons for, 90-92.
- Easter Subjects**, for construction work; eggs, II, 52; rabbit, 64; greetings, 74.
- Eclectic Method**, or combination method, in reading, I, 28.
- Elves and the Shoemaker**, The, dramatization of, I, 190-193.
- Emergencies**, accidents, II, 308-309; inclement weather, 309-310; precautions against fire, 310; contagious diseases, 310-312.
- Emotions**, moral influence of, II, 251.
- Entertainments**, II, 315.
- Envelope**, construction work, II, 48, 69.
- Equipment**, for nature study, I, 326-328.
- Eraser Race**, I, 219.
- Erasers**, II, 312.
- Exaggeration**, how corrected, II, 273.
- Examinations**, II, 336-337.
- Exhibitions of art work**, II, 93, 148; of penmanship, 178-179; of general school work, 320-321.
- Experiments**, in study of minerals, I, 287.
- Expression**, in reading, I, 72-73; in interpreting music, II, 224.
- Eye-Minded Children**, I, 45
- Eyes**, The, protective parts, II, 193-194; visible parts of, 194; care of, 194-196; tests of, 236.
- Fairy Tales**, I, 166-167.
- Farm**, The, construction work, II, 66-69.
- Farmer in the Dell**, The, words and music, I, 204.
- Farming**, lessons on, II, 29. See OSTRICH FARMING.
- Field Glasses**, in nature study, I, 327.
- Finger Nails**, The, function of, II, 199; care of, 199-200.
- Fire**, precautions against, II, 310.
- First Year Reading**. See READING.
- Fishes**, I, 386.
- Flag**, the national, subject for art work, II, 127-128, 150; for decoration, 320.
- Flicker**, The, study of, I, 327.
- Flower Pot Cover**, construction work, II, 72.
- Flowers**, for the school garden, I, 354-356; II, 294; for the schoolroom, II, 320
- Fly**, lessons on the, I, 426-441.
- Fly Away** I, 211.
- Flying Cloud**, I, 211.
- Folding**, exercises in: first year, II, 47-48, 50-52; second year, 55-56, 58, 60-65; third year, 69-71, 75-79.
- Folk-Tales**, as models of a good story, I, 166.
- Follow Your Leader**, I, 223.
- Food**, for birds, I, 372.
- Foods**, lessons on, II, 29.
- Foot**, The, study of, II, 202-204.
- Foreigners**, teaching English to, I, 153-156.
- Foreign Lands**, I, 105; study of, 106-109.
- Form**, in penmanship, II, 169; devices for teaching forms, 169-170.
- Fountain**, The, words and music, I, 227.
- Four Winds**, The, II, 14.
- Fractions**, first year, lesson in, I, 263-264. Second year, lesson to develop rule for finding a fraction of any number, 296-298; lesson to develop relation between fourths and eighths, 298-299; suggestions for teaching one-half of five, one-half of seven, etc., 300. Third year, addition, illustrative lesson, 309-313; decimals, 317-319.
- Friday Program**, The, II, 327-328.
- Frogs**, I, 388.
- Furniture**, cut from paper: general directions, II, 45; the house, 45-46; colonial cradle, 58; screen, 60-61; table, 63; chair, 63-64; bed, 64; doll's house, 77-79. For the school, II, 292-294
- Games**. See PLAYS AND GAMES.
- Gardening**, subjects from, for paper cutting, II, 44, 66.
- Gardens**, I, 350; plants for school gardens, 353. Scenes from, for drawing studies, II, 136-138. See SCHOOLROOM GARDENS.
- Garden Tools**, I, 336.
- Geography**, place of, in primary grades, II, 1; material, 1-3; teacher's preparation, 3-5; outdoor studies, 5-6; study of types, 6-8; the potato, 8-11; a brook basin, 11-13; the wind, 13-16; ostrich farming, 16-19; reviews, 19-20; work for first and second grades, 20-23; work for third grade, 23-28; suggestive lessons for primary pupils,

- 28; suggestive lessons for third grade, 28-29; relation to history, 30; books for teachers, 35-36; correlated with physiology, 187; sense factor in, 241-243.
- Ginger Cat, The**, words and music, I, 237.
- Going to Jerusalem**, I, 212.
- Government**, local, study of, II, 244.
- Grades**, two or more in a room, II, 323.
- Grains**, in nature study, I, 367.
- Grape**, lessons on the, I, 411-426.
- Grenfell, Helen L.**, extract from address, II, 253.
- Grouping**, in reading, I, 95-96.
- Grover, Edwin**, extracts from the TEACHER'S CREED, I, 5.
- Habits**, I, 5-7; bad, in reading, 97-98; of mental work, II, 341-343.
- Halves, Thirds and Fourths**, lesson on, I, 263-264.
- Hand, The**, study of, II, 202, 203.
- Handkerchief Case**, construction work, II, 75.
- Happiness**, a factor in discipline, I, 17-18.
- Have My Seat**, I, 217.
- Head**, parts of the, II, 192-193.
- Heating Apparatus**, II, 288-289.
- Hektograph, The**, I, 56-57.
- Helpers**, appointment and service of, II, 322.
- Hen**, Study of the, I, 385.
- Hens and Chickens**, construction work, II, 46.
- Heredity**, moral influence of, II, 250-251.
- Hiawatha**, story of, II, 32-33; subject for art work, 106, 107.
- Hill-Dill**, I, 212.
- Historical Stories**, I, 137, 169.
- History**, relation to geography, II, 30; lessons on modes of travel, 30-32; Indian life: story of Hiawatha, 32-35; sense factor in, 243-344. See INDIAN LIFE.
- Holder**, construction work; sewed, II, 49; woven, 59.
- Home, The**, decreased influence of II, 249; agent in moral training, 253-254.
- Home Geography**, study of, II, 23-24.
- Honesty**, development of, II, 274-276.
- Horse, The**, I, 393.
- House, The**, subject for construction work, II, 45-46; doll's house, 77-79.
- Human Element**, in geography lessons, II, 2.
- Hunt the Fox**, I, 219.
- Hunt the Slipper**, words and music, I, 209.
- Hygiene**, teaching of, II, 185-186.
- Ideals**, in discipline, I, 3-5; of children, how formed, II, 252.
- Illustration**, free, II, 86-88; of poems, 99, 129; of reading lessons, 104-105; of stories, 128.
- Imaging Power**, value of, in spelling, II, 163.
- Imitation**, in music study, II, 214-216.
- Incentives**, to reading, nature of, I, 64-65; how used, 65-67.
- Inclement Weather**, care of children during, II, 309-310.
- Indian Life**, the story of Hiawatha, II, 32-33; the Indian's dress, 33; houses, 33-34; the Indian baby, 34; work, 34-35; modes of transportation, 35; amusements, 35; subject for art work, 106-107.
- Indian Lullaby**, words and music, I, 232.
- Industries**, first hand study of, II, 242-243.
- Industry**, training in, II, 276-277.
- Influences**, silent, I, 20-21.
- Ingersoll, Ernest**, extracts from *Nature Calendar*, I, 334, 339-341.
- Initials**, teaching use of, I, 152.
- Ink**, for penmanship lessons, II, 172.
- Insects**, in nature study, I, 406; caterpillar, 406; moths and butterflies, 407; the eggs, 408; the larva, 408; the pupa, 408; the adult butterfly, 409; lessons on the fly, 426-441; lessons on the mosquito, 441-447.
- Interpretation**, in music, definition, II, 222-223; methods, 223-224.
- In the Spring**, words and music, I, 188.
- Invitations**, art work, II, 148.
- I Say Stoop**, I, 213.
- Jack and Jill**, words and music, I, 233.
- Janitor Service**, II, 307.
- Joints, The**, study of, II, 202-203.
- Journeys**, I, 137. See TRAVEL AND ADVENTURE.
- Kindness**, training in, II, 264; toward schoolmates and friends, 264; toward animals, 265-266; proper treatment of plants, 266.
- Kite**, construction work, II, 74.
- Kite Time**, words and music, I, 238-239.
- Knowledge**, dependence upon senses, II, 233-234.

- Lamb's-quarters**, or **PIC-WEED**, I, 366.
- Landscape**, in nature study, I, 345.
- Language**, problem stated, I, 125; first step, 125-126; child's equipment, 126-127; teacher's part, 127-128; every lesson a language lesson, 128; relation to other subjects, 128-129; undesirable lessons and their correctives, 129; oral reproduction, 129-130; similes and metaphors, 130-131; methods illustrated, 131; suggestive exercises, 131-133; other phases of oral reproduction, 133-135; technical forms, 135-137; historical stories, biographies and journeys, 137; language games, 138-139; oral composition of plays, 139; language and drawing, 139; written language, 139-140; steps in written work, 140-142. Picture lessons, general suggestions, 143; last month of first year, 143-145; latter part of second year, 145; third grade, 146-148. Rhythm and rhyme, 133; second year, 145-146; third year, 152. Other lesson subjects, 148. Language through literature, 148. Written reviews: last part of first year, 148-149; latter part of second year, 149; last part of third year, 150-152. Initials and abbreviations, 152-153; teaching English to foreigners, 153-156; letter writing, 156-158; memorizing selections, 158-160; teachers' aids, 160-161; correlated with number work, 214; correlated with physiology, II, 187.
- Language Games**, I, 138-139.
- Lanterns**, construction work, II, 49; crayon studies of, 120.
- Larva**, *The*, of butterflies and moths, I, 408.
- Law**, counteracting disregard for, II, 248-249.
- Law of Association**, *The*. See **ASSOCIATION**.
- Laws**. See **RULES**.
- Legends**, I, 81-82, 110.
- Lens**, Tripod, I, 335.
- Letter Writing**, I, 156-157.
- Lighting**, II, 291.
- Limbs**, *The*, parts and uses of, II, 202.
- Lincoln**, Abraham, quoted, II, 248.
- Lion and the Mouse**, *The*, dramatization of, I, 80-81.
- Literature**, for second year reading class, I, 78-82; for third year reading class, 110-114; racial, 115-117; basis of language lessons, 148; extracts for memorizing, 158-160; selections for nature study, 293, 306-307, 328, 329, 331, 338, 342, 345, 347; use of, in teaching physiology, II, 206; for Friday program, 327; for special days, 329.
- Little Artist**, *The*, I, 343.
- Little Farmers**, words and music, I, 228.
- Little One Eye**, **Little Two Eyes**, **Little Three Eyes**, I, 171-177; outline, 177-180.
- Little Red Riding Hood**, I, 51-52; reading lesson based on, 52-53.
- Love of Country**, how cultivated, II, 280.
- Lullabies**, **BABY DEAR**, I, 231; **Indian Lullaby**, 232.
- Lunches**, II, 307-308.
- Lying**, nature and causes of, II, 271-272; how corrected, 272-273.
- Magazines**, for school library, II, 315.
- Mammals**, I, 393.
- Management**. See **SCHOOL MANAGEMENT**.
- Maps**, study of, II, 25.
- Marching Games**, I, 179.
- Market Gardening**, study of, II, 28-29.
- Marking Papers**, methods for, II, 337-339.
- Match Scratcher**, construction work, II, 51.
- Maxims and Proverbs**, I, 16-17.
- May Baskets**, construction work, II, 52, 75; art work, 140.
- Measurement**, illustrative lesson in, I, 209-212; lessons to cultivate ability to judge measurements, 215-217.
- Memorizing Selections**, I, 158-160.
- Mental Work**, habits of. See **HABITS**.
- Metaphors**, use and study of, I, 130-131.
- Methods**, choice of, II, 339-340.
- Modeling**, II, 100-101, 104.
- Moral Act**, nature of a, II, 250.
- Moral Sense**, lack of development, II, 249.
- Moral Training**, necessity for, II, 248-250; factors in the problem, 250. Internal agencies: nature of moral act, 250; heredity, 250-251; emotions, 251; the will, 251-252; experiences, 252; ideals, 252. External agencies: importance, 252-253; the home, 253-254; society, 254-256; schoolhouse and

- grounds, 256; the schoolroom, 256-257; the school, 257-258; daily lessons, 258; the teacher, 258-259. Methods: underlying principles, 259-260; a good beginning, 260; general school regime, 260-261; special lessons, 261-262; politeness, 262-264; kindness, 264-266; reverence, 266-267; promptness, 267-268; obedience, 268-269; responsibility, 269-271; truthfulness, 271-274; honesty, 274-276; industry, 276-277; conduct, 277-279; self-control, 279; love of country, 280; pupil government, 280-283; aids, 283-284.
- Mosquito**, lessons on the, I, 441-447.
- Mother's Meetings**, II, 308-311.
- Moths**, I, 407.
- Mouth, The**, II, 196-197.
- Movement**, in penmanship, II, 170-171.
- Muffin Man, The**, words and music, I, 207.
- Multiplication**, in first year, lesson in, I, 264-267. In second year, illustrative lessons: simple multiplication, 283-287; "carrying" process, 287; multiplier of two figures, 287-290.
- Music**, aim of, in public schools, II, 211; material, 212; care of children's voices, 212-213; general principles of methods, 213-214; imitation, 214-216; recognition of tone, 216-218; representation of tone, 218-220; recognition of rhythm, 220; representation of rhythm, 221-222; Interpretation, 222-224; order of development, 224-230; general suggestions, 230-231; books for teachers, 231-232.
- Mustard, Wild**, I, 363.
- My Shadow**, I, 339.
- Myths**, I, 81-82, 110, 168.
- Napkin Ring**, raffia, II, 58.
- Napkins**, paper, construction work, II, 48.
- Natural Forces**, study of, I, 337.
- Nature Stories**, I, 168-169.
- Nature Study**, educational value, I, 322; what gives it value, 322; qualifications of a good teacher, equipment for the teacher, 326; equipment for the schoolroom, 327; how to use the schoolroom equipment, 328; nature on every hand for study, 337; natural forces and phenomena, 337; sunshine, shadow, dawn, twilight, night, 337; rain, 340; snow, 342; clouds, 343; wind, 344; sound, 345. Landscape features, 345; what to teach, 345; a type for study, 346. Plant study, 350; gardens, 350; plants for the school garden, 353-357; interest in soils, 357; an individual plant, 357; trees, 358; weeds, 362; daisy, 363; wild mustard, 363; Canada thistle, 364; orange hawkweed, 364; wild morning-glory, 365; dandelion, 365; wild carrot, 365; lamb's-quarters, 366; sheep sorrel, 366; quackgrass, 367; weeds for schoolroom study, 367; grains and grasses, 367; autumn harvest of orchard and garden, 368; wild flowers, 369. Animal life, 369; where to find material, 370; birds, 371; the food of birds, 372; suggestions on bird study, 377; nesting boxes, 379; the crow, 382; the robin, 384; birds that tell their names, 384; study of the hen, 385; fishes, 386; amphibians, 388; reptiles, 391; mammals, 393; the horse, 393; cows, 398; sheep, 400; the dog, 401; the cat, 402; rats and mice, 403; squirrels, 404; rabbits, 406; insects, 406; reference books, 410; test questions, 411; lessons on the grape, 411; lessons on the fly, 426; lessons on the mosquito, 441. Correlated with geography, II, 20, 23; correlated with physiology, 168-187; sense factor in, 425.
- Nature's Good-Night**, words and music, I, 240-241.
- Neck, The**, parts of, II, 201.
- Nesting Boxes**, I, 379.
- Night**, I, 337.
- Nose, The**, parts of, II, 196; care of, 196.
- Number Cards**, I, 260-261.
- Number Circle**, I, 276-277.
- Number Concept**, origin of the, I, 205-207.
- Number Facts**, for primary grades, I, 235-236.
- Number Pictures**, I, 213.
- Number Work**, first year: adaptation of methods, I, 244; value, 244-245; origin of number concept, 245-247; methods in vogue, 248; ground covered, 248-249; plan, 249; lesson in measurement, 249-252; devices for counting, 252-254; correlation of number and language, 254; lessons to cultivate ability to judge measurements, 255-257; lesson to secure rapidity and accuracy in combination and separation of small num-

- bers, 258-259; use of charts, 260-262; lesson in written work, 262-263; lesson on halves, thirds and fourths, 263-264; lesson in multiplication, 264-267; lesson in use of ruler, 267; lesson in counting by tens, 267-270; correlation of number work with other studies, 270; aids, 270-271. Second year: work of, 272; facts that the teacher should remember, 272-273; order of procedure, 273-275; primary number facts, 275-276; devices, 276-277. Illustrative lessons: addition, 277-281; subtraction, 281-283; simple multiplication, 283-287; multiplication involving "carrying process," 287; multiplication with multiplier of two figures, 287-290; division, 290-296; developing rule for finding fraction of any number, 296-298; developing relation between fourths and eighths, 298-299; finding one-half of five, one-half of seven, etc., 300. Third year: text-book work: preliminary steps, preparatory lessons, illustrative lesson, 302-306; reduction of denominate numbers, illustrative lesson, 306-309; addition of fractions, illustrative lesson, 309-313; ratio and proportion, illustrative lesson, 313-316; written work, 316-317; decimals, 317-319; other features of third year work, 319-320; typical problems, 320; correlated with physiology, II, 187; sense factor in, 240-241.
- Numbers Change, I, 212.**
- Obedience, I, 13; II, 268-269.**
- Observation, training of, II, 245-246; 340-341.**
- Occupation Songs, LITTLE FARMERS, I, 228; THE THRESHERS, 229-230.**
- Occupations, studied by geography class, II, 27, 28.**
- Officials, of school, II, 297-298.**
- Old Stone, The, I, 219.**
- One Eye, Two Eyes, Three Eyes, I, 171.**
- Opera Glasses, for nature study, I, 327.**
- Oral Reading, in the first year, I, 37-38; in the third year: relation to silent reading, 102-103; the critical period, 103-104; illustrative lesson, 104-109.**
- Oral Reproduction, of stories, I, 129-130, 133-135.**
- Orange Hawkweed, I, 364.**
- Order and Disorder, defined, I, 7-8; causes of disorder, 18-20.**
- Organization, of school, II, 321-322.**
- Ostrich Farming, type study of, II, 16-19.**
- Outbuildings, II, 295.**
- Outdoor Studies, in geography, II, 5-6.**
- Paper, for art work, II, 81; for penmanship work, 171-172.**
- Paper Cutting. See CUTTING.**
- Paper Folding. See FOLDING.**
- Patrons, of the school, II, 296-297.**
- Pen, manner of holding the, II, 212-213; for penmanship lessons, 172.**
- Pencils, for drawing, II, 81-82; use of, 118; for penmanship lessons, 171.**
- Penmanship, learning to read writing, II, 166; what penmanship includes, 167; aid of sense training, 167; objects sought, 167-168; teacher's preparation, 168; position, 169; form, 169; devices for teaching forms, 169-170; movement, 170-171; material, 171-172; ruling and rulers, 172-173; writing on blackboard, 173-174; seat lessons, 174-175; plan of work, 175-177; causes of trouble, 177; patience and persistence, 177; causes of poor writing, 177; time for lesson, 177-178; uniformity of handwriting, 178; exhibition of penmanship, 178-179; how much to do, 179; drill exercises and counting, 179-182; aids, 182; sense factor in, 239-240.**
- Penwiper, construction work, II, 49.**
- Perception Cards, I, 222, 236.**
- Periodicals, II, 314-316. See MAGAZINES.**
- Perspective, study of, II, 126.**
- Phonic Method, in teaching reading, I, 26-27.**
- Phonics, for first two grades: a separate study, I, 83; training ear and tongue, 83-84; associating sound and symbol, 84-86; diacritic marks, 86-89; syllabication, 89; summary, 89; suggestive lessons, 90-92. In third year, 99-100.**
- Phrases, New, how taught, I, 63-64.**
- Physical Welfare, of pupils, I, 19-20; II, 304.**
- Physiology, teacher's preparation, II, 184; purpose outlined, 184; hygienic results expected, 185-186; correlation with other subjects, 186-188; method of procedure, 188-189; earliest lessons, 189-191; parts of body, 191; illustra-**

- tive lesson, 191-192; parts of head, 192-193; the eyes, 193-196; the nose, 196; the mouth, 196-197; the ears, 197-199; the finger-nails, 199-200; the skin, 200-201; parts of neck and trunk, 201-202; the limbs, 202; the joints, 202-203; hand and foot, 203-204; the bones, 204-205; the blood, 205; waste and repair, 205-206; correlated literature, 206; temperance physiology, 206-209.
- Picture Frame**, construction work, II, 71-72, 75.
- Pictures**, used in reading lessons I, 35-36; language lessons based on, 143-148; last month of first year, 143; latter part of second year, 145; third grade, 146. **Picture study**: value, II, 151-152; method, 152; subjects for, 152-153; aids, 153. **THE ANGELUS**, 8-9; pictures of the Christ child, 110; Millet's paintings, 134; animal painters, 142; for decoration, 317-318; list of appropriate subjects, 318-320.
- Plan**, for recitation, introduction, II, 329-330; development, 330; drill, 330-332; summary, 332.
- Plant Study**, I, 350; gardens, 350; plants for school garden, 353-357; interest in soils, 357; an individual plant, 357; trees, 358; weeds, 362; daisy, 363; wild mustard, 363; Canada thistle, 364; orange hawkweed, 364; wild morning-glory, 365; dandelion, 365; wild carrot, 365; lamb's-quarters, 366; sheep sorrel, 366; quack grass, 367; weeds for school-room study, 367; grains and grasses, 367; autumn harvest of orchard and garden, 368; wild flowers, 369; lessons on the grape, 411-426.
- Play**, meaning of, I, 199; play and work, 199; special purposes of play in school, 200; the teacher's place in play, 203.
- Playgrounds**, II, 295.
- Plays**, oral composition, of I, 139. See **DRAMATIZATION**.
- Plays and Games**, I, 198-224; importance of, 198; meaning of play, 199; play and work, 199; special purposes of play in school, 200-202; why games should be taught, 202; teacher's place in play, 203; materials and apparatus, 203; selection of games, 204; games, with and without songs, 204-224; Charley over the Water, 204; the Farmer in the Dell, 205; Round and Round the Village, 206; The Muffin Man, 207; Hunt the Slipper, 209; miscellaneous games, 210-220; ball games, 220; sense games, 221; playful exercises, 223; bibliography, 224.
- Poetry**, for second year reading, I, 78-79; for third year reading, 113.
- Pointers**, II, 312.
- Politeness**, training in, II, 262; at school, 262-263; at home, 263-264.
- Portfolios**, construction of, II, 114, 150-151.
- Post Card Album**, construction work, II, 70-71.
- Poster, Puritan**, II, 53; Christmas tree, 54.
- Potato, The**, type study of, II, 8-11.
- Presto**, Change, I, 223.
- Prevarication**, II, 273-274.
- Prizes**. See **REWARDS**.
- Problems**, typical, third year number work, I, 320.
- Products**, studied by geography class, II, 27.
- Program**, temporary and permanent, II, 321; points to be considered, 322-323; grades in a room, 323; other considerations, 324; for Friday, 327-328; special days, 328-329.
- Promptness**, how taught, II, 267-268.
- Pronunciation**, local errors in, I, 38-39.
- Proportion**. See **RATIO**.
- Proverbs**. See **MAXIMS**.
- Public Buildings**, lessons on, II, 27-28.
- Pumpkin Masks**, construction work, II, 56.
- Punctuation**, marks of, I, 31-32; and reading, 76-77.
- Punishment**, for primary grades, I, 21-22.
- Pupa, The**, I, 408.
- Puppl Government**, purpose of, II, 280; Citizen and Tribune plan, 280-282; results obtained, 282-283.
- Pupils, The**, differences in, II, 300-301.
- Purse**, woven, II, 72-73.
- Quack Grass**, I, 367.
- Questioning**, characteristics, II, 333-334; distribution, 334-335; answers, 335-336.
- Quotations**, books for, II, 64.
- Rabbits**, I, 406.
- Racial Literature**, I, 115-116.
- Raffia**, braiding, II, 56-58; cording 58;

- napkin ring, 58.
- Rain, I, 340.
- Ratio and Proportion, illustrative lesson, I, 313-316.
- Rats and Mice, I, 403.
- Ray, John T., Citizen and Tribune plan of pupil government, II, 280-283.
- Readers, how used, I, 82-83.
- Reading, first year: importance of, I, 25; methods for, 25-29; early lessons, 29-32; later lessons, 33-37; oral, 37-38; local errors in pronunciation, 38-39; the alphabet, 39-40; from script to print, 40-41; chart making, 41-42; adaptation of method to school, 42-45; blackboard lessons, 46-49; introduction to books, 49; supplementary reading, 49-51; preparation of a lesson, 51-53; reviews, 53-56; the hektograph, 56-57. Second year: need of reviews, 59-60; value of supplementary reading, 60-61; need of preparing lessons, 61; contrast with first year conditions, 61-63; new phrases, 63-64; incentives, 64-67; teaching children to study, 67-68; application of theory, 68-72; syllabication, 72; expression in reading, 72-73; rules for criticism, 74; corrections by pupils, 74-76; directions for reading, 76; study of punctuation, 76-77; rules for capitals, 78; poetry, 78-79; supplementary reading, 79-81; myths, fables and legends, 81-82; amount of reading required, 82; how to use readers, 82-83; phonics for first two grades, 83-92. Third year: the situation, 94-95; order of procedure, 95-96; breathing, 96-97; bad habits, 97-98; rules for readers, 98; the alphabet, 98-99; phonics, 99-100; rules for pronunciation, 100-101; sight reading for first three years, 101-102; silent and oral, 102-103; the critical period, 103-104; illustrative lesson, 104-109; selection of reading matter, 110-113; poems, 113; supplementary reading, 113-114; reading and study, 114-115; racial literature, 115-117; an artistic accomplishment, 117-118; causes of poor reading, 118-119; material for drills, 119-122; books for teachers, 122-123; books for pupils, 123; correlated with physiology, II, 187; sense factor in, 239. See PHONICS.
- Realistic Stories, I, 167.
- Receding Lines, study of, II, 124-126.
- Recesses, II, 324-325.
- Recitation, The, purpose, II, 329; plan, 329-332; teacher's preparation, 332-333.
- Reference Books, for nature study, I, 410.
- Relay Touch Race, I, 215.
- Repair. See WASTE.
- Reptiles, I, 391.
- Responsibility, how developed, II, 269-271.
- Restlessness, I, 12-13.
- Reverence, how taught, II, 266-267.
- Reviews, in first year reading, I, 33, 53-56; in second year reading, 59. In language, written: first year, 148-149; second year, 149; third year, 150-152. In geography, II, 19-20. General nature of, 336-337.
- Rewards and Prizes, I, 22.
- Rhyme, first study of, I, 133; in the second year, 145-146; in the third year, 152.
- Rhythm, in verse: introduction to, I, 133; second year study, 145-146; third year study, 152. In music, recognition of, II, 220; representation of, 221-222; drill exercises, 223-224.
- Robin, The, I, 384.
- Roosevelt, Theodore, extract from address of, I, 3-4.
- Roots, study of, I, 314.
- Rote Song, The, II, 214-215.
- Round and Round the Village, words and music, I, 206.
- Ruler, use of, in first year number work, I, 227; in penmanship work, II, 172-173.
- Rules, for capitals, I, 32, 78; for criticism, 74; for reading, 76, 98; for pronunciation, 100-101; for care of children's voices, II, 212-213; for conduct, 278-279.
- Rules, or Laws, for the school, I, 13-16; characteristics of, 14; enforcement of rules, 14; preventing disorder, 15.
- Ruling, for penmanship lessons, II, 172-173.
- Salamander, I, 391.
- Sand Box, The, II, 293.
- Santa Claus, construction work, II, 54, 66.
- Scale, The, teaching of, II, 226.
- Scale Songs, THE FOUNTAIN, I, 227; COASTING, 227; UP THE LADDER, 227;

- THE DREAM PEDDLER, 228.
- School and Its Environment, The**, agencies in moral training, II, 256-258; teacher's responsibility and preparation, 285-286; the problem, 286; school-house, 286-292; furniture, 292-294; grounds, 294-296; patrons, 296-297; school officials, 297-298; the superintendent, 298-300; the pupils, 300-301; the teacher, 301-304; requirements, 304-305. See SCHOOLHOUSE, SCHOOL MANAGEMENT.
- School Gardens, I**, 350; plants for, I, 353.
- School Grounds**, a moral agency, II, 256; arrangement and decoration, 294-296.
- Schoolhouse**, agency in moral training, II, 256; care of, 286-287; seats, 287-288; heating apparatus, 288-289; ventilation, 289-290; points to remember, 290-291; lighting, 291; condition of building, 291-292; furniture, 292-294.
- School Management**, importance, II, 307; general matters, 307-308; emergencies, 308-312; apparatus, 312-314; books and periodicals, 314-316; decorations, 316-321; organization, 321-322; helpers, 322; program, 322-324; recesses, 324-325; work for pupils not reciting, 325-327; Friday program, 327-328; special days, 328-329; the recitation, 329-333; questioning, 333-336; reviews and examinations, 336-337; amount of written work, 337; marking papers, 337-339; choosing methods, 339-340; order of procedure, 340-341; habits of mental work, 341-343. See SCHOOL AND ITS ENVIRONMENT.
- School Regime**, made conducive to right moral development, II, 260-261.
- Schoolroom, The**, influence upon moral development, II, 256-257.
- Schoolroom Gardens**, window boxes, I, 312; tumbler gardens, 312-313; sponge gardens, 313; vegetable cups, 313.
- Screen**, construction work, II, 60-61.
- Script**, transition from, to print, I, 40-41.
- Seats**, II, 287-288.
- Seeds**, for the school garden, I, 353-357; books for, II, 55-56.
- Self-Control**, development of, II, 279.
- Sense Games, I**, 221.
- Sense-Organs**, defective, need of tests for, II, 234-235; testing the ear, 235-236; testing the eye, 236; right conditions, 236-237; development, 237.
- Senses, The**, function of, II, 233; relation of senses and knowledge, 233-234; necessity for use of, 234; defective sense-organs, 234-237; facts concerning, 237-238; sense factor in all lessons, 238-245; importance of indirect sense-training, 245-246; books for teachers, 246.
- Sense Training**, an aid to penmanship, II, 167; correlated with physiology, 188; indirect, importance of, 245-246; systematic procedure, 340-341.
- Sentence Method**, in teaching reading, I, 28.
- Serpentine Race, I**, 214.
- Sewing Bag, II**, 59-60.
- Shadow, I**, 337.
- Sharp Ears Games, I**, 83, 90.
- Sheep, I**, 400.
- Sheep Sorrel, I**, 366.
- Short Division**. See DIVISION.
- Shrubs**, for schoolgrounds, II, 294-295.
- Sight Reading**, for first three years, I, 101-102.
- Silent Influences**. See INFLUENCES.
- Silent Reading, I**, 72, 102-103.
- Smiles**, use and study of, I, 130-131.
- Sing a Song of Sirpence**, words and music, I, 234-236.
- Skin, The**, study of, II, 200-201.
- Slander**, how prevented, II, 274.
- Sled**, construction work, II, 71.
- Snow, I**, 342; lesson on, II, 28.
- Society**, influence upon moral training, II, 254; the street, 254-255; the gang, 255; other organizations, 255-256.
- Soils**, interest in, I, 357.
- Soldier's Cap**, construction work, II, 61-63.
- Song of the Seasons**, words and music, I, 236.
- Songs, I**, 224-241; value of, 224; classification, 225; dramatization, 225; how to teach a song, 225; how to phrase the song, 226; interpretation, 226. Selections: scale songs, 227; occupation songs, 228; lullabies, 231; unclassified, 233.
- Sound, I**, 345.
- Sound and Symbol**, association of, when taught, I, 84; resemblances, 85; initial vowels, 85-86; first use of phonics, 86.
- Special Days, II**, 328-329.
- Specimens**, of school work, II, 320.

- Spelling**, what spelling includes, II, 154; preparatory work, 155; oral and written, 155-156; first lessons, 156-157; how much to spell, 157; plan for written work, 157-159; deficient children, 159-160; how to study lessons, 160-162; visualization, 162-163; value of imaging power, 163; law of association, 163-164; spelling and drawing, 164; spelling in sentences, 164-165; rules for teachers, 165-166; correlated with physiology 187.
- Spin the Plate**, I, 210.
- Spotted Newt**, *The*, I, 390.
- Squirrels**, I, 404.
- Stained Glass Effects**, art work, II, 144.
- Stars**, construction work, II, 50.
- Statues**, a game, I, 210.
- Stedman, Edmund Clarence**, *THE FOUR WINDS*, II, 14.
- Stencils**, for nature study, I, 283.
- Stevenson, Robert Louis**, *FOREIGN LANDS*, I, 105; *SUMMER SUN*, 338; *MY SHADOW*, 339; *RAIN*, 341; extract from *AUTUMN FIRES*, II, 15; *THE WIND*, 15-16.
- Stitching**, exercises in, II, 46-47.
- Stories**, for first year reading class, I, 50-51; for second year reading class, 64-65, 80-82; for third year reading class, 110-117; for language work, 129-130, 133-135, 137, 148; how to select, 165.
- Story Reproduction**, I, 180.
- Story-Telling**, in language lessons, I, 129-130, 133-135. Introductory statement, I, 163; special value of, 163-165; how to select stories for telling, 165; some characteristics of a good story, 166; folk tales as models, 166; realistic stories, 167; myths, 168; nature studies, 169; method in story-telling, 169-171; type of story and outline, 171; One Eye, Two Eyes and Three Eyes, 171-177; outline of the story, 177-180; story reproduction, 180; method, 181.
- Study**, teaching methods of, I, 67-68; independent, 72; relation to reading, 114-115.
- Subtraction**, in first year, I, 253; 258-263; in second year, illustrative lessons, 281-283.
- Summer Sun**, I, 338.
- Sun**, *The*, study of, II, 28.
- Sunshine**, I, 337.
- Superintendent**, *The*, II, 298-300.
- Supplementary Reading**, for first year, I, 49-51. In second year, value, 60-61; kinds of, 79-82. In third year, 113-114.
- Supply Houses**, for art materials II, 83.
- Surface**, in geography, II, 26.
- Sweet and Low**, II, 15.
- Syllabication**, I, 72, 89.
- Syllabus**, first three years' music, II, 226-230.
- Sympathy**, need of more, I, 16.
- Table**, a wall, I, 328; construction work, II, 63.
- Tardiness**, I, 11.
- Teacher**, *The*, responsibility for order, I, 18-19; qualities as a disciplinarian, 22-23; preparation for reading lessons, 61; success in language work, 127-128; facts to be remembered in number work, 272-273; preparation for number work, 319-320; preparation for nature study, 325; preparation for geography, II, 3-5; preparation for construction work, 38-39; rules for, in teaching spelling, 165-166; preparation for penmanship lessons, 168; preparation for physiology lessons, 184; moral influence of, 258-259; attitude in teaching, general preparation, 285-286; her problem, 286; character, 301-302; personal appearance, 302-303; qualifications, 303; responsibility, 303-304; requirements, 304-305; preparation for recitation, 332-333.
- Teakettle**, use in nature study, I, 336.
- Technical Forms**, in language work, I, 135-137.
- Temperance Physiology**, II, 206-209.
- Tempo**, recognition of, II, 224.
- Tennyson, Alfred**, *SWEET AND LOW*, II, 15.
- Terrarium**, A, I, 329.
- Test Questions**, *DISCIPLINE I*, 25; *FIRST YEAR READING*, 57; *SECOND YEAR READING*, AND *PHONICS*, 92; *THIRD YEAR READING*, 123; *LANGUAGE*, 161; *STORY - TELLING*, *DRAMATIZATION*, *GAMES*, *PLAY AND SONGS*, I, 241; *FIRST YEAR NUMBER WORK*, 271; *SECOND YEAR NUMBER WORK*, 300-301; *THIRD YEAR NUMBER WORK*, 320-321; *NATURE STUDY*, 411; *GEOGRAPHY AND HISTORY*, II, 36; *CONSTRUCTION WORK* 79; *DRAWING*, 93, 101, 108, 116, 122,

- 128-129, 134, 140, 146, 151; SPELLING AND PENMANSHIP, 182-183; PHYSIOLOGY, 209-210; MUSIC, 232; USE OF THE SENSES, 246-247; MORAL TRAINING, 284; SCHOOL AND ITS ENVIRONMENT, 305-306; SCHOOL MANAGEMENT, 343.
- Thanksgiving**, subject for construction work: dinner table, II, 44-45; place cards for dinner, 70; Subject for art work, 106-108.
- Thieving**, I, 10-11.
- Three Deep**, I, 216.
- Threshers, The**, words and music, I, 229.
- Toads**, I, 388.
- Tommy Tiddler's Ground**, I, 211.
- Tone**, recognition of, II, 216-218; representation of, 218-220.
- Tongue**, training the, methods for, I, 84; associating sound and symbol, 84-86; diacritic marks, 86-89; suggestive lesson for, 90-91.
- Travel**, means of, studied by geography class, II, 27; history lesson on, 30-32.
- Trees**, in nature study, I, 358; on school grounds, II, 294.
- Triangular Box**, construction work, II, 50-51.
- Tripod Lens**, I, 335.
- Trunk, The**, parts of, II, 202.
- Truthfulness**, forms of, II, 271; lying, 271-273; exaggeration, 273; prevarication, 273-274; slander, 274.
- Tumbler Gardens**, I, 312-313.
- Turtles**, I, 391.
- Twilight**, I, 337.
- Type Lessons**, in first year reading, I, 51-53, 55-56; in second year reading, 68-71, 77, 80-81; in phonics, 90-92; in third year reading, 104-109; in language, 131-133, 143-145, 146-148, 149-152; in story-telling, 171-180; in first year number work, 249-270; in second year number work, 277-300; in third year number work, 303-316, 317-319; in nature study, 346-350, 382, 385; in geography, II, 8-19, 28-29; in history 30-35; in construction work, 40-79; in drawing, 84-151; in penmanship, 179-182; in physiology, 191-192.
- Up The Ladder**, words and music, I, 227.
- Valentines**, construction work, II, 51-52, 64, 73-74; art work, 127.
- Value of Story-Telling**, I, 163.
- Ventilation**, II, 289-290.
- Village**, construction work, II, 53-54.
- Visualization**, of words, II, 162-163.
- Voices**, children's, care of, II, 212-213; uniting, 215-216.
- Wagons and Parade**, construction work, II, 66.
- Waste and Repair**, lessons on, II, 205-206.
- Water Colors**, for school use, II, 82; brushes, water color pan, 82; use of, 85-86.
- Weather**, study of, II, 20-22. See CLIMATE.
- Weather Calendar**, II, 21-22.
- Weaving**, construction work, II, 59, 72.
- Weeds**, I, 362.
- Whispering**, I, 8-10.
- White**, Emerson E., extract from SCHOOL MANAGEMENT, I, 5.
- Wigwags**, study of, II, 33-34.
- Will, The**, training of, II, 251-252.
- Wind**, I, 344; type study of, II, 13-16.
- Wind, The**, poem, I, 344.
- Windmill**, construction work, II, 77.
- Wonder Box, The**, I, 83-84.
- Word Method**, in teaching reading, I, 27-28.
- Work Table, The**, II, 293.
- Writing**. See PENMANSHIP.
- Written Work**, in language, I, 139-142, 148-152; in first year number work, 262-263; in third year number work, 316-317; amount of, II, 337.

130294

Hughes, James Laughlin and others.
Public school methods.
vol.2.

Educat
Teach
H

DATE

NAME OF BORROWER

**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

Acme Library Card Pocket
LOWE-MARTIN CO. LIMITED

